S. HRG. 100–340

FEDERAL AVIATION ADMINISTRATION FISCAL YEAR 1988 BUDGET AMENDMENT AND SUMMER SAFETY INITIATIVES

HEARING

BEFORE A

SUBCOMMITTEE OF THE
COMMITTEE ON APPROPRIATIONS
UNITED STATES SENATE

ONE HUNDREDTH CONGRESS

FIRST SESSION

SPECIAL HEARING

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FEDERAL AVIATION ADMINISTRATION FISCAL YEAR 1988 BUDGET AMENDMENT AND SUMMER SAFETY INITIATIVES

WEDNESDAY, JULY 8, 1987

U.S. SENATE,
SUBCOMMITTEE ON TRANSPORTATION AND RELATED AGENCIES,
COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10 a.m., in room SD–138, Senate Dirksen Office Building, Hon. Frank R. Lautenberg (chairman) presiding.

Present: Senators Lautenberg, Harkin, D'Amato, and Kasten.

DEPARTMENT OF TRANSPORTATION

SECRETARY OF TRANSPORTATION

STATEMENT OF HON. ELIZABETH HANFORD DOLE, SECRETARY OF TRANSPORTATION

ACCOMPANIED BY JANET HALE, ASSISTANT SECRETARY FOR BUDGET AND PROGRAMS

OPENING STATEMENT OF SENATOR LAUTENBERG

Senator LAUTENBERG. Good morning. I am going to call the Subcommittee on Transportation of the Appropriations Committee to order.

Of course we are delighted, as always, to welcome our distinguished Secretary of Transportation. Today the subcommittee will consider two related topics.

First, we will review the administration's $51.5 million budget amendment for FAA operations, which was requested by the Secretary on June 3. Second, we will review the initiatives recently publicized by the Department to assure safer air travel this summer.

The administration's budget amendment seeks another $51.5 million for 580 additional controllers, 83 new firstline supervisors, and 92 more traffic management coordinators. It would also fund supervisor and traffic coordinator positions that are now either vacant or filled by controllers on temporary assignment.

In addition, the request covers the 225 controllers already added by this subcommittee in the fiscal year 1987 supplemental appropriation. The request also provides for expansion of radar training facilities.

The administration proposes to fund all of these increases by transferring moneys from a variety of other transportation programs and projects. The Congress, GAO, the Safety Board, and the user community have been saying for some time now that there are serious shortfalls in air traffic control staffing.

The administration apparently would have us believe that this had no influence on the decision to request more air traffic personnel. We were told the amendment was based, and I quote here, on an "exhaustive reassessment" that was conducted over the past 3 months, and that we should not be surprised because the Secretary has said that if more controllers were needed, she would ask for them.

I believe that this hearing will show that FAA's system for determining its staffing needs is seriously flawed. It also will show that the public was deceived about the controller staffing problem.

Now let me give you the highlights of the official statements made to this committee and to the public over the last 5 months. In our budget overview hearing on February 25, Senator D'Amato and I strongly questioned whether 225 additional controllers for fiscal year 1988 would be enough.

The Secretary told the subcommittee that this was looked at very carefully as the Department prepared the budget. A month later, Deputy Secretary Burnley again assured the subcommittee that 225 additional controllers were all that were needed for fiscal year 1988.

On May 7, Administrator Engen reiterated the Department's position before this subcommittee. He said that the request, "includes the amount called for by our staffing standards, plus over 500 additional personnel for our training pipeline and to cover unscheduled requirements."

Thus the Administrator was stating that a controller work force level of 15,225, which was set by the subcommittee for fiscal year 1987, would not really be needed until fiscal year 1988.

During the same period, the subcommittee heard testimony on studies by GAO and the NTSB which revealed significant staffing shortages at a number of major air traffic control facilities.

In fact, the situation was so serious that on May 13, NTSB issued a class 1 urgent action recommendation calling for restrictions on air traffic this summer. But as late as May 28, in an op-ed piece in the Washington Post, the Administrator minimized controller staffing shortages.

He said, "FAA has initiated a number of innovative programs designed to deal with this problem and expects to achieve optimum staffing levels by the end of the year." Let me repeat that. FAA expects to achieve optimum staffing results by the end of this year, this year being fiscal year 1987.

Then on June 3, only 6 days after the op-ed piece, the subcommittee unexpectedly received a letter from the Secretary announcing the completion of FAA's exhaustive reassessment and asking for 580 more controllers.

The other major issue we will address today concerns FAA's response to the Safety Board's recommendation to limit peak levels of traffic this summer. This is another classic case of contradictory and confusing statements on a very serious matter.

Let us look at the record again. At first former Administrator Engen publicly denounced Chairman Burnett, saying in effect that he, Burnett, did not understand the system, did not know what he was talking about. He suggested that Mr. Burnett consult with President Reagan if he wanted to restrict air commerce. Then a few days later we were informed that FAA was giving serious consideration to the Board's recommendation.

Next we were told that FAA was already doing what the Safety Board wanted done by means of its traffic flow control system. Finally, on June 11, the trumpets blared, a press conference was called, and we all learned of several special actions underway to ensure safer air travel this summer.

Our hearing today will disclose that the real scope and substance of these initiatives is less than advertised. So I will close with this observation.

I hope that today can be a new beginning. For too long now we have been subjected to a deliberate and persistent campaign of doubletalk, and petty technicalities on some vitally important issues.

We are tired of these word games, and we hope they stop. We want to have a relationship based on mutual trust and candor. In fact, we have such a relationship with many of the professionals in the FAA and the Department.

And we value their candid advice and assistance. But for those who would choose to persist in doubletalk, let me say this, as chairman, I assure you that this committee will continue to listen very carefully to what is said.

We intend to get the facts, one way or the other. The issues are extremely important, and we want to be helpful. But, of course, we always want the truth.

Madam Secretary, if the tone sounds harsh, it results from what I would have to characterize as a very difficult couple of years experience before I became chairman of this subcommittee, in which we were in a constant tug-of-war, where we forced by formula, in conjunction with FAA's recommendation to a staffing level that had to be met.

And the persistent tone that we heard was, do not worry about it, everything is A–OK. The system is safe. Yes, we are working on it. We do have some shortages. But we are working on it.

When it was suggested that we alleviate the stress and the strain in the system by reaching into a pool of fired controllers who had broken the law but had paid the price, and who could have helped us achieve the staffing that we needed, it was said that we would demoralize the controller work force. Thus, the tug-of-war continued.

Now you have a brand new union. And unions do not happen if people are happy. What happened is that they were under such stress, such strain, and such fatigue that they cried out in any way that they could and said, "Listen, we need relief." So they formed another union.

Secretary Dole, there is no one in the cabinet for whom I have more respect than you. I know how hard you work at the job. You are a very talented person. And I want our relationship to be as it has been over these couple of years—forthright, candid, intent on getting the job done. If we differ on methodologies, so be it. But this is not designed in any way to reduce, in my estimation or the public's estimation, the work that you have done.

I would like, as I said in closing my formal remarks, to get on with a new beginning. One that is forthright, one that is open, and one that says, "OK, I made a mistake, you made a mistake, he or she made a mistake. But let us get on with it and fix it."

With that, Madam Secretary, I invite you to give us your testimony.

Senator D'AMATO. Mr. Chairman, if you might.

Senator LAUTENBERG. I am sorry. I did not acknowledge my distinguished ranking Member, Senator D'Amato.

STATEMENT OF HON. ALFONSE D'AMATO, U.S. SENATOR FROM NEW YORK

Senator D'AMATO. Mr. Chairman, I am delighted and pleased to see our Secretary of Transportation, the most gracious member of our cabinet and a great cabinet officer, and I am very pleased that she comes before us today to discuss the serious situation as it relates to air traffic and air traffic controllers and the problems.

And I want to commend her for having been so forthright. It is not easy for a cabinet member to come forward and say, "Yes, I am going to ask for additional resources," particularly in the days of restraint, et cetera.

And I want to commend the Secretary for asking for that $51.5 million that will enable 955 air traffic control personnel to be added, 580 of them to be controllers during fiscal year 1988.

This has been contentious. Air traffic has taken tremendous leaps as it relates to deregulation, bringing in new airlines, competitive forces, and in our own region, Mr. Chairman, the New York metropolitan-New Jersey area, we have seen, particularly in New Jersey, the tremendous increase in terms of air traffic, number of flights, et cetera.

So, Madam Secretary, I applaud you for your decision. I have to suggest to you, I think that some of the advice given by FAA in the past to you has not been that kind of advice that I have always agreed with. I have disagreed.

But I am delighted, and I agree fully and totally, with respect to your action in going forward as it relates to the increased personnel. I look forward to the new administrator, Mr. McArtor, coming on board.

I look forward to his cooperative effort, and that new spirit of invigoration, which I think is so terribly important. And I am going to look forward to not only your testimony but to that of Mr. Burnett.

Mr. Chairman, I join with you in saying I think we are past the time of who did what to whom and who did not do, and I think it is important that we get these resources into the system, our air traffic controllers, our new flight systems, so that we can give the best in the way of safety and transportation and cut down on what seems to be the interminable delays that we face at our nation's airports. Thank you.

[The statement follows:]

STATEMENT OF SENATOR D'AMATO

Mr. Chairman, I join you in welcoming Secretary Dole to this hearing. She is here to discuss her amended budget request for an additional $51.5 million to add 955 air traffic controller personnel—including 580 controllers—during fiscal year 1988. Also testifying are witnesses from the Federal Aviation Administration [FAA], and from the National Transportation Safety Board [NTSB].

I am sure that my colleagues on this subcommittee agree with me that aviation safety is a top priority. Just last week, the Senate approved the conference report to the fiscal year 1987 supplemental appropriations bill providing funds for another 225 controllers by September 30, 1987. The administration had proposed adding the 225 controllers in fiscal year 1988. Current law requires FAA to reach a level of 15,000 controllers by the end of fiscal year 1987; when the supplemental bill becomes law, it will mandate a minimum controller work force of 15,225 a year earlier than the administration planned.

I am pleased that the Secretary has amended her budget to ask for the extra funds needed. I note that the FAA Administrator did not request funds for additional controllers when he testified before us on May 7 and 8. It is clear that the Secretary has reevaluated the situation. I applaud her decision. Obviously, we need to examine how FAA evaluates its air traffic control system needs.

The Secretary must rely on the advice given her by FAA as to aviation safety and the growing needs of our nation's airspace system. I regret to say that she has been poorly served in this regard. The existing margin of aviation safety has been strained by the explosive growth in airport operations, and the delays in modernizations promised by the ambitious National Airspace System [NAS] plan. FAA has refused to come to grips with these issues.

The President has now nominated a new FAA Administrator, T. Allan McArtor. Mr. McArtor faces tremendous challenges. He must have the courage to make his own assessment of FAA needs, and press Congress to assist his program. This subcommittee is willing to help.

I look forward to hearing from Mr. Burnett, Chairman of the National Transportation Safety Board [NTSB]. NTSB recently made recommendations concerning steps that FAA should take to reduce the risk of accidents this summer. I am interested in Mr. Burnett's views on summer travel safety as well as on DOT's amended budget request. In addition, I am very interested in the testimony that we will hear from FAA's air traffic control experts.

Thank you, Mr. Chairman.

STATEMENT OF SECRETARY DOLE

Senator LAUTENBERG. Thank you, Senator D'Amato. I am sorry I did not acknowledge you sooner.

Madam Secretary, it is your turn.

Secretary DOLE. Thank you very much, Mr. Chairman. I am happy to appear before the subcommittee today to address our fiscal year 1988 budget amendment for the Federal Aviation Administration. As you know, for fiscal year 1988, I asked for a 20-percent increase in FAA funding. That is about $1 billion and that is almost unprecedented. This, I think, was a very important increase at the time that obviously federal spending must be reduced to bring down the deficit but we do not propose in any way to economize on safety.

Now with regard to the budget amendment, I have repeatedly told the FAA Administrator that he will get as many additional controllers as he believes he needs. And while we had planned to reach a controller work force of 15,225 by September 30, 1988, we now anticipate reaching that level at the end of this fiscal year, as requested by your report on the fiscal year 1987 supplemental.

The administration's original request for a 15,225-controller work force by the end of fiscal year 1988 was based on the best information and projections available when the budget was submitted. This is an 18-month process. But U.S. aviation is in a period, as we all know, of rapid change. And management principles, as well as practical necessity, dictate that the FAA continuously review and update its projections. Thus I fully support Don Engen's request for 580 additional controllers and 375 additional support personnel.

ESTIMATES FOR TRAFFIC GROWTH

Now in the past we have slightly overestimated future air traffic activity and growth. But of course that has certainly not been the case with the FAA's projections for fiscal year 1988. During March, FAA began a 3-month reassessment of its aviation forecasts and related controller requirements. As a result, FAA now believes that instead of the originally projected 3 percent to 4 percent annual traffic growth, it would be prudent to assume that we will see traffic growth at a 5 percent to 6 percent annual rate through next year.

This increase in air traffic growth projections, plus other steps we are taking to enhance aviation safety, such as creation of additional airport radar service areas [ARSA's] and the addition of 20 new air sectors nationwide, means we will need to begin training additional controllers and crucial support personnel in the next few months, looking to the fiscal year 1988 period. Because waiting for the next budget cycle would have introduced an unacceptable 1-year delay, we proposed a fiscal year 1988 budget amendment on June 3, which adds the 955 people to FAA's previous request.

The FAA Administrator has testified repeatedly that an increase in supervisors and technical staff is equally as important as controller work force increases. So this amendment does provide the 375 additional on-site support staff to manage the system. Included are supervisors and traffic management coordinators and other technical support personnel. Traffic management coordinators work in the centers and towers, and by monitoring the operation of the system, help improve the flow of traffic, which of course enhances safety and reduces delays.

I might add, Mr. Chairman, that you have had an opportunity to see the aircraft situation display. This is an impressive new tool that these particular traffic management coordinators will use to improve the flow of traffic across the United States.

Another important feature of our amendment is the expansion to at least two additional centers of the radar training program for controllers, which has been very successful for the Chicago center. This program utilizes the computer capability of the FAA academy to simulate the actual sectors at designated centers. Thus it accelerates the process of qualifying developmental controllers with site-specific training.

CONTROLLER STAFFING GOALS

Let me emphasize one point that I think is very important. The proper way to set controller staffing goals is by analysis of the actual traffic demands the system is facing and is projected to face in the future, and by application of technical staffing standards for all of the necessary personnel—controllers, supervisors, and technical support personnel.

Statutory targets can inadvertently distort traffic management in ways that eventually impede the FAA's ability to handle traffic as safely and efficiently as possible. And I would urge that you not lock FAA into those kinds of percentages or numbers.

One example which might be useful is statutorily establishing a minimum number of controllers to achieve full performance level [FPL]. Let me focus on that one for just a moment. Most of the 375 noncontroller positions in the amendment and the 50 supervisory positions in our original fiscal year 1988 budget request will be filled by promoting full performance level controllers. These people will not be lost to the system. In fact, they will be performing integral air traffic functions, but they will no longer be counted as FPL's. And these promotions will temporarily reduce the number of FPL's in the work force.

Since FAA can neither promote nor certify additional operational controllers to FPL status until they meet the requisite qualifications, a statutory FPL floor could put pressure on managers to delay promotions of FPL controllers to supervisory positions, or to restrict movement of FPL's between facilities in order to maintain a high FPL count. It comes down to a choice, then, between meeting a statutory mandate and best managing the air traffic control system.

I hope that you will join the House committee in favorably considering the personnel increases we have requested while resisting efforts to limit the FAA's managerial flexibility in ways that would be detrimental.

And Mr. Chairman, I would just like to add, you mentioned working together, and I certainly share that desire, and I think that we have had an opportunity in a number of areas to do just that, whether it is on age 21 drinking law, whether it is on automatic train controls, whether it is on the drug issue, where we have taken very important steps.

We are the first department in the federal government, other than the military, to require random drug testing. I think this is an enormously important safety initiative. And we have had the opportunity to work together in these and other areas. So I look forward to continuing that relationship and making it a very positive working relationship, because our interest is the traveling public.

Now when I arrived at the Department, I want to just elaborate another moment, because when I got to the Department, I felt, and this was over 4 years ago, one thing that was happening that was causing a great deal of movement, in other words it was a dynamic atmosphere, was the effect of deregulation.

When I was on the Federal Trade Commission many years ago, we were the first in the federal government to speak out for deregulation. And I am going to take just a moment on this, because it is something that I have lived with for many years. I felt this was a very important consumer issue, something that would benefit the consumer. And I have had many years in the consumer movement. We spoke out, we said first of all we are going to clean our own house.

And we eliminated literally hundreds of regulations that we thought were no longer serving the public interest. In fact, some of them were even regulating industries that no longer existed.

And then we began to intervene before the ICC and the CAB and other agencies to promote competition in the marketplace, head-to-head competition that would produce better quality goods, lower fares and lower prices, and more innovative goods for consumers.

And we were the first to do that. And it was very much a consumer issue. And now we see what has happened is a democratization of the airways. People are flying today who never, ever thought they would have the means to fly. This is not an elitist mode of transportation anymore. There are a lot of people up in the air who are for the first time flying. In fact, Brookings Institution recently estimated about $6 billion a year that the traveling public is saving.

So, as I looked at the results of that, and the fact that we have a dynamic industry, we have changes occurring, one of the things that seemed to me was important was that we apply management tools that would ensure that FAA is also making the changes to stay ahead, or at least stay abreast of this dynamic marketplace.

SAFETY TASK FORCE

And one of the tools that I put into place early on was a safety task force, because, in addition to reviewing all of our various functions to make sure that we are doing them as well as possible, I felt it was essential to make changes where needed.

And that was the purpose of the task force, self-examination, and I believe in that, self-criticism, making certain that you are doing it as well as possible, finding new ways where you need to update and upgrade your procedures.

The task force went to work with that in mind, and FAA was their first area of review. And I think that anyone who has examined the task force recommendations for FAA, FRA, for Federal Highways, for hazardous materials, all across the board, for security in the air, will say it is anything but a whitewash. They have come in with very good recommendations which my modal administrators have adopted in each instance. So that has been underway all of these years, as well as other management tools designed to look ahead.

And, as I said, safety is very important to me. It is my top priority, and I wanted to make certain that safety is in no way being deregulated, as we go forth with economic deregulation. So I just lay this out as sort of a basis for where I have been coming from over the years that I have served in this position, and I will be happy to answer questions that you may have.

[The statement follows:]

STATEMENT OF ELIZABETH DOLE

I am happy to have the opportunity to appear before this subcommittee today to address our fiscal year 1988 budget amendment for the Federal Aviation Administration. For fiscal year 1988, the Department requested a 20-percent increase in FAA funding over fiscal year 1987 levels. Even though federal spending must be reduced to bring down the deficit, we do not propose to economize on safety.

I have repeatedly told the FAA Administrator that he will get as many additional controllers as he believes he needs. I supported Don Engen when he came to me in May and said he needed additional controllers, as I had on similar occasions in September 1985, January 1986, and January 1987. While we had planned to reach a controller work force of 15,225 by September 30, 1988, we now anticipate reaching that level at the end of this fiscal year, as required by your report on the fiscal year 1987 supplemental.

The administration's original request for a 15,225-controller work force by the end of fiscal year 1988 was based on the best information and projections available when the budget was submitted. But U.S. aviation is in a period of rapid change, and management principles, as well as practical necessity, dictate that the FAA continuously review and update its projections.

In the past, we have slightly overestimated future air traffic activity and growth, but that has certainly not been the case with FAA's projections for fiscal year 1988. During March, FAA began a 3-month reassessment of its aviation forecasts and related controller requirements. As a result, FAA now believes that, instead of the originally projected 3 to 4 percent annual traffic growth, it would be prudent to assume that we will see traffic growth at a 5 to 6 percent annual rate through next year.

This increase in air traffic growth projections, plus other steps we are taking to enhance aviation safety, such as creation of additional airport radar service areas and addition of 20 new air sectors nationwide, means we will need to begin training additional controllers and crucial support personnel in the next few months. Because waiting for the next budget cycle would have introduced an unacceptable 1-year delay, we proposed a fiscal year 1988 budget amendment on June 3, which adds 955 people to FAA's previous request.

FAA's amended staffing request includes 580 additional controllers—for a total of 15,805 controllers and air traffic assistants by September 30, 1988. In addition, the FAA Administrator has testified repeatedly that an increase in supervisors and technical staff is equally as important as controller work force increases; so this amendment provides 375 additional onsite support staff to manage the system, including supervisors, traffic management coordinators, and other technical support personnel. Traffic management coordinators work in the centers and towers and, by monitoring the operation of the system, help improve the flow of traffic, thereby enhancing safety and reducing delays.

Another important feature of our amendment is the expansion to at least two additional centers of the radar training program for controllers which has been successful for the Chicago center. This program utilizes the computer ability of the FAA academy to simulate the actual sectors at designated centers and thereby accelerates the process of qualifying developmental controllers with site-specific training.

Let me emphasize one point: The proper way to set controller staffing goals is by analysis of the actual traffic demands the system is facing and is projected to face in the future, and by application of technical staffing standards for all of the necessary personnel—controllers, supervisors, and technical support personnel. Statutory targets can inadvertently distort traffic management in ways that eventually impede the FAA's ability to handle traffic as safely and efficiently as possible.

One example is statutorily establishing a minimum number of controllers to achieve full performance level [FPL]. Most of the 375 noncontroller positions in the amendment and the 50 supervisory positions in our original 1988 budget request will be filled by promoting FPL controllers. These people will not be lost to the system; in fact, they will be performing integral air traffic functions. But they will no longer be counted as FPL's, and these promotions will temporarily reduce the number of FPL's in the work force.

Since FAA can neither promote nor certify additional operational controllers to FPL status until they meet the requisite qualifications, a statutory FPL floor could put pressure on managers to delay promotions of FPL controllers to supervisory positions or to restrict movement of FPL's between facilities in order to maintain a high FPL count. It comes down to a choice between meeting a statutory mandate and best managing the air traffic control system.

I hope that you will join the House committee in favorably considering the personnel increases we have requested, while resisting efforts to inappropriately limit the FAA's managerial flexibility.

This completes my statement, and I would be pleased to respond to any questions from the subcommittee.

EFFECTS OF DEREGULATION

Senator LAUTENBERG. Madam Secretary, you have covered a lot of ground in the several years that you have been in this assignment, including the sale of Conrail and many very positive things.

I do not think that we yet have the final scorecard on deregulation in its present format. As you know, coming from the private sector, I support deregulation wherever it can be appropriately instituted.

But I wonder, as we have increased the number of people taking to the air instead of the buses and the highways, whether or not we are able to guarantee them the same safe level of travel that the airlines were noted for in the past.

Actually the record, it could be argued, is better, but there are indications that have me concerned. And we will discuss those in just a minute.

The other thing that I wanted to mention is that if the market forces are truly at play, you get a good buy as a consumer. If, however, there tends to be a concentration of routes, a concentration of service in the hands of a single carrier, then you start to get just the opposite effect.

What you do is you see increasing rates, and the thing that the public absolutely does not know is what kind of measures are being taken to bring that initial price down to the level that is attractive to the ordinary working person.

Is there a sacrifice in the standards for safety and maintenance in order to meet the cost configuration? Is there a change in the basic service?

I frankly think there is. Even though it is not sufficient to relate one person's story, the fact is that I see incidents of things that concern me.

Again, there is the matter of safety. There also is the discomfort level that one gets when they do not generate enough air in the cabin during long delays before takeoff.

Secretary DOLE. May I make this one comment?

Senator LAUTENBERG. Sure.

Secretary DOLE. I think as we talk about how you and I both want to do everything we can to make what is the safest system in the world ever safer, we should keep it in context. And this is something that I think warrants repeating as often as I can repeat it, because I have found that when I mention these numbers it amazes many people who have no concept of just what a vast system this is and how effective it is.

Last year, 415 million passengers traveled 302 billion miles on scheduled carriers without a single fatality. We have about 90,000 traffic movements a day in the United States. We have about 1 million people traveling every day by air. And it is 99.999 percent that reach their destination without an incident of any sort.

Now that does not mean you are not going to do everything you know to do to always be looking ahead and trying to make the safest system safer. But I think it is important to keep it in perspective that for the last 25 years, both the fatality rate and the accident rate have been coming down in a favorable way. And we did have an excellent year, statistically, last year, in terms of commuters, general aviation scheduled carriers. But as I say, you know, certainly we have undertaken any number of things, which I would be happy to discuss today.

No question people are having consumer problems. I think some of that is because we were going through this period of transition with the number of mergers. And let me just say that, as far as how this will affect prices, competition has remained fierce. Bargains are still widely available. In fact the recent series of mergers reflects the kind of normal consolidation typical——

Senator LAUTENBERG. Is that even between Washington and New York, let us say?

Secretary DOLE. Yes.

Senator LAUTENBERG. Is the rate now at an all-time low? Could it be, maybe, at an all-time high?

Secretary DOLE. As far as the actual rate between New York and Washington, I can not speak to that right at the moment.

What I have seen, though, is service that, from my own personal experience, is enormously improved service.

Senator LAUTENBERG. They announce your arrival, that is what it is.

Secretary DOLE. No; you see, they are actually serving some food. They have a number of services, I think, improvements on the New York to Boston shuttle——

STATEMENT OF HON. ROBERT W. KASTEN, JR., U.S. SENATOR FROM WISCONSIN

Senator LAUTENBERG. Before everybody has witnessed our personal debate, I think I should recognize our colleague from Wisconsin, Senator Kasten. Senator? An opening statement, if you have one. Or any comments.

Senator KASTEN. Mr. Chairman, thank you very much. I do have a statement, and I would like to just ask that it be included in the record at the appropriate place.

Senator LAUTENBERG. Without objections.

[The statement follows:]

STATEMENT OF SENATOR KASTEN

Thank you, Mr. Chairman. I am pleased that we are once again to hear from the Secretary of Transportation, Elizabeth Dole, and Mr. Burnett of the National Transportation Safety Board. The concerns of the Congress, the American public, the NTSB, and the Department of Transportation have rightfully been the subject of many hearings before this subcommittee and the Commerce Committee's Aviation Subcommittee this year.

I am pleased that today we are to hear from the Secretary regarding the DOT's amended budget request for an additional $51 million for 955 more personnel in the air traffic control area. The shortage of ATC personnel has been one of several grave concerns that I have had about our air transportation system. I know that this has been a major concern of yours, Mr. Chairman, as well as the Ranking Member, Senator D'Amato.

As the Secretary has pointed out in her announcement of this additional request, it takes time to bring controllers into the system, and I commend her for the Department's reappraisal of their needs. To wait for the next budget cycle would be inappropriate.

I must also say that for all of the evidence that we have heard in the past from the NTSB, the GAO, and the Department itself, the fact that almost 1,000 more people are sought in the controller, supervisory, and technical functions of the ATC system is not surprising. Many of us in Congress have felt that such an increase had to occur given our present and future demands on the system. I am heartened that the DOT and FAA are now urging upon us a position that we have, with some frustration at times, been urging upon the Administrator of the FAA and others in the recent past.

Strides in flow control, specific sector analysis of overload, the east and west coast plans, and other practices of the DOT and FAA are encouraging. But at a time when the NAS plan is running behind schedule and air traffic has increased dramatically, we must recognize that only with a sufficient number of qualified people will the system operate in the safest mode possible.

Many things are needed, from more concrete to more modern equipment to better operational modes among the carriers. But at the heart of the system are the people in the air traffic control function. I am pleased to consider the Department's proposal to address this most important aspect of the system.

Thank you, Mr. Chairman.

ADEQUACY OF STAFFING STANDARDS

Senator LAUTENBERG. To continue, you stated that the proper way to set controller staffing goals is by analysis of the actual traffic demands and by the application of technical staffing standards for all of the necessary personnel, that is controllers, supervisors, and technical support personnel.

You are saying that this request for increased numbers of controllers is based on the proper way as defined by the application of technical staffing standards, et cetera.

Secretary DOLE. Yes; that is correct.

Senator LAUTENBERG. Are you satisfied with the adequacy of FAA's basis for this amendment, as well as its original request and the process that they use for determining staffing needs?

Secretary DOLE. Yes.

Senator LAUTENBERG. OK. Are you satisfied that FAA's process for determining its staffing needs fits the nomenclature that you earlier described, for example, application by analysis of the traffic demands, et cetera?

Secretary DOLE. Yes; in fact, maybe if we could just go through the steps for a moment, that would be helpful. And there is a difference between staffing standards, in other words, engineered standards are utilized for controllers. For support personnel, it is general guidelines, Mr. Chairman. And we are taking a look at that. There are maximums. But it is different, right now it is not engineered standards. It is general guidelines that are utilized.

Senator LAUTENBERG. Please continue.

Secretary DOLE. May I just for a moment, and if this is going in the wrong direction, you say so. But I think it might be helpful just for a moment to look at what went into the preparation of the fiscal year 1988 budget and then the amendment.

In late 1985 the process was begun. As FAA received from OMB such things as data on gross national product, on disposable income, on fuel costs, on the consumer price index, that is where the fiscal year 1988 process began. Then in January 1986, the FAA went to the airlines and received data with regard to what their fleet mix would be, what fares were likely to be, as much information as possible at that point, in order to make their economic forecasts in February 1986 for the fiscal year 1988 budget cycle. That was necessary at that point in order that their budget could come forward to the Office of the Secretary in July and the process could move forward to appear before you in early January 1987.

The staffing standards were applied to this data, and basically the staffing standards rely on a sector-by-sector analysis. The projected workload in each sector depends on factors like the sector size and complexity, the number of aircraft that is projected to go through that or to be handled by that sector, whether or not that particular sector is going to be handling a lot of takeoffs and landings, or whether it is going to be more planes operating at cruise altitude. All of that makes a difference in the staffing standards that are applied to all this massive data.

Senator LAUTENBERG. I think we may be getting lost here. Could you summarize?

Secretary DOLE. Well, my only point here is that obviously we have a changing situation.

And I may be back again. I mean with revised estimates later in the year.

Senator LAUTENBERG. But you are now talking about a variety of things that frankly, I think, serve not to clarify, but to justify.

Secretary DOLE. It is just how the system works.

ENGINEERED STANDARDS

Senator LAUTENBERG. I am going to ask you this, Madam Secretary. Does FAA have staffing standards for supervisors at en route centers?

Secretary DOLE. No.

Senator LAUTENBERG. That is, you do not have engineered standards.

Secretary DOLE. But general guidelines, not engineered standards.

Senator LAUTENBERG. What is the general guideline? What qualifies these people to serve in these jobs?

What is it that says, these people are exactly what we need? Here is the specification. Go get us some of those. What is the nonengineered standard that you refer to?

Secretary DOLE. Well, I would be glad to provide for the record what the general guidelines are, Mr. Chairman. I think there is a panel that is going to follow us to do exactly what you are asking, to lay out the details and the specifics.

Senator LAUTENBERG. So then you are aware that there is no complete set of standards?

Secretary DOLE. There are no engineered standards on the noncontroller work force in terms of supervisors and traffic management coordinators. There are general guidelines.

That is being looked at now. There are maximums. Janet, do you have anything you would like to add to that?

Ms. HALE. Mr. Chairman, I hear you asking, I think, a couple questions.

One, for determining the number. We have the maximum at the facilities. Again, that allows us to have flexibility in complex centers. They need to have that flexibility to deal with the day-in and day-out changes, and to how that center operates. When you ask about the qualifications for those, of course there are standards that we set about how those individuals are going to be put into those positions. So I think that there are two. One, how we determine——

Senator LAUTENBERG. Are you satisfied with FAA's technical staffing standards for all of the personnel?

Ms. HALE. I believe that the FAA——

Senator LAUTENBERG. I mean, the Secretary is saying there are no engineered standards. I do not know quite what that means, I must tell you, and of course I do come from a technical background.

Ms. HALE. The FAA is currently reviewing those staffing standards.

Senator LAUTENBERG. Are they being reviewed because they did not have them or are they being reviewed because they want to improve them?

Ms. HALE. I think it is part of the ongoing improvements and review as we have it. We know that we probably have to go back and look a little bit deeper into the tower standards.

Senator LAUTENBERG. Is it possible that they do not have them?

Ms. HALE. I do not think the Secretary or the FAA would want to do anything that would constrain their flexibility to deal with those individual towers and centers and how they are operated.

UPDATE OF STAFFING REQUIREMENTS

Senator LAUTENBERG. The response of the FAA to the GAO, June 4, 1987, says in a footnote, there is no staffing standard for traffic management unit staffing. That is their word.

Let us go on. Madam Secretary, in your letter announcing this budget amendment, you say it is based on an exhaustive reassessment which was made over the past 3 months.

However, the subcommittee staff was informed that the amendment is really the result of a major overhaul of FAA's system for determining its staffing requirements. Moreover, this process is still incomplete, but it has been going on for almost 2 years.

Was the Department aware that the FAA system for determining staffing requirements needed to be substantially improved? Was there an awareness that this system had to be improved from where it was?

Secretary DOLE. Mr. Chairman, this is an ongoing matter. As I mentioned early on, I set up the safety review task force, with the idea that we are going to look at everything. We are going to constantly be examining ourselves. And that is going to continue, because I believe in self-examination, and I do not want in any way for the FAA or OST or any of us to be inhibited from doing the best job we can to constantly self-examine and say we can change something and make an improvement.

I think that this kind of ongoing assessment, where we are ahead of the fiscal year 1988 budget, in fact I have in the materials here a Lyndon Johnson request, just going back to 1967, where in the actual budget year they ask for an amendment for air traffic controllers, actually in the budget year. I mean, this is nothing new. And we are going to be coming back.

Senator LAUTENBERG. Yes; it is not new, except that as late as weeks ago everybody was being assured not to worry about it. The system is A–OK. We have enough people to do the job.

From Admiral Engen on down or up, as you want to describe it, people said, we have enough. And all of a sudden, within a week, the situation has changed.

Secretary DOLE. Well, now, I am aware of the fact that, of course, we are continually assessing, and this 3-month review was looking over 6 months of data, actually, from October through the end of April.

DELAYED IMPACT OF ADDITIONAL CONTROLLERS

Senator D'AMATO. Mr. Chairman, I am wondering if at this point I might raise a point.

It would seem to me, Madam Secretary, that what we are really talking about is that your projection as it relates to the increases in the outyears are such that at 5 percent and 6 percent you have determined that there is and will be a need to put into those towers, these additional personnel, 900 plus personnel.

And so that, notwithstanding that we would like to attempt to say to our people and wish we could say, that the situation is going to improve dramatically, the fact of the matter is that these people will not be on board for 2 years.

And were we not to do this, because we are just looking for the authority, we would have deep, deep, deep trouble, and what we face now would pale in comparison as air traffic goes up.

So consequently I do not think it is a matter that we are talking about addressing all of the problems that we have in the situation, but certainly looking ahead. And I think, as one who has joined with you, as you know, in many, many occasions in saying, let us look ahead, I want to applaud the Secretary because what we are saying is that 2 years down the road we are going to have these people in the towers.

And with the exception of those that you are going to be upgrading, it is going to take 2 years to get these people. Some of the people you can get in. But it is going to take that long to train these people. Is that a fair assessment?

Secretary DOLE. Yes; it will take 1 year for a controller to be an operational controller, and then for full performance level you are talking about a total of 3 years. And with regard to full performance, let me just stress here, that the operational controller is fully qualified and certified on his or her assigned sector. He or she may be the best controller there is on that sector.

So, you know, we are talking about different stages of proficiency, and overall it would take 3 years to reach the stage of full performance level, and we are trying to look ahead. And I want to stress that, you know, I do not want you to be surprised if I come back again and say, we have done another assessment. We are looking at traffic, going down the road, and, you know, this is a dynamic situation.

And on the area of inspectors, I can tell you right now that I think looking ahead to fiscal year 1989, I am probably going to be saying, we need some more inspectors, as we move ahead, you know, keeping up with the demands. This is the dynamic nature of what we are dealing with.

And just one other comment on Don Engen. You know, it could be here that if you feel that he did not lay this out the last time that he was here, that the analysis, of course, at that point was not complete. The whole survey had not been completed and the analysis completed. And perhaps at that point he was just reluctant to move out on it before the entire process was completed, Mr. Chairman. But it has been something that was ongoing for several months.

Senator LAUTENBERG. Well, the projection is being changed radically late in the process.

Secretary DOLE. But it is early.

Senator LAUTENBERG. Frankly, it has me challenging what it was that we used to determine what the need was.

After all, budgeting is a familiar process to you certainly. The FAA Administrator knew that he was being pushed from all kinds of people, GAO, NTSB, the Congress. Everyone was saying: We think you need more personnel.

And the FAA chief was saying, no, I have reviewed this thoroughly. In March he submitted a written statement to a question that I asked him. He said that the originally requested staffing level will be adequate through fiscal year 1988.

Secretary DOLE. That was based on the data that he had before him then.

Senator LAUTENBERG. I want to give you the tools to do the job. But I also want to feel very comfortable about the process that we are going through, because I do not know whether this is enough.

And frankly, based on what we are seeing, I do not know that you know that this is enough.

Senator D'AMATO. Mr. Chairman, may I make an inquiry? Are we operating under a 10-minute rule or a 5-minute rule or half-hour rule? Because I would like to raise a question, if I might.

Senator LAUTENBERG. I will give you the floor. We now have a vote on. I would be pleased, Senator D'Amato, if you choose whether would you like to vote first.

NTSB RECOMMENDATIONS ON REDUCING AIR TRAFFIC

Senator D'AMATO. I have a question I think gets to one of the areas that both you and I have raised, and the National Transportation Safety Board has raised.

I would just like to, while we have the Secretary, because I know she has a busy schedule, I just raise this one question with her.

On May 13 of this year, Madam Secretary, the Safety Board issued recommendations on reducing air traffic at those busy airports during peak times during the summer. The Safety Board stated that it was concerned about increasing trends in controller errors, near midair collisions, and runway incursions.

What is the Department doing with respect to those recommendations? And have you adopted those recommendations?

Secretary DOLE. Yes; we have done exactly what the NTSB was suggesting, as far as I can see, Senator D'Amato. On May 4, the FAA Administrator asked the 20 en route centers to assess the air sectors. We have 652 air sectors. We are adding 20 more. And they were asked, each one, to assess the air sectors to determine where there might be the possibility of reaching capacity during these summer months where 70 percent of these delays are caused by weather. In fact, Don Engen, some of his records show, it can, during part of the year, be up as high as 89 percent, 90 percent of these delays caused by weather.

All right, so they look at these sectors to see, are there some where we might reach capacity this summer? And I think that is exactly what the NTSB is talking about. All right, they identified, I believe, it was 125. Now, let me hasten to say, that number can change because all of this is a continuing review, a continual monitoring. Of those 125, in about 28 of them right now, we are either slowing down traffic, keeping the planes on the ground, or rerouting the planes to ensure that those air sectors do not reach capacity. Now that is, I think, exactly what the

NTSB was talking about, and that is being done. The program began June 4, and it was announced June 11.

Senator D'AMATO. So it is a matter of semantics as it relates to attempting to keep levels down during peak hours and exactly how you reached that. So you recognize——

Secretary DOLE. It is metering. This is metering the system. Now, another way you can do it, you could——

Senator D'AMATO. I am sorry the chairman was not here, because I think it really got to the nub of some of the inquiries, and the reasonable question that would be raised as it relates to what would appear to be a divergence of opinion as it relates to how do we see to it that we maximize air safety as it relates to those areas, dense travel areas, et cetera, during peak times.

Secretary DOLE. Right. Well, the flow control process we have had underway for some time. What this does, it is not just on the ground now, it is the air sectors as well. And this, you know, may mean more delay in some instances. But it is a small part of the overall delay issue. And certainly when you are making the decision between safety and avoiding delays, you are going to opt for safety every time. And this is where we are on this particular issue, that we will slow some down in the interest of safety.

Senator D'AMATO. I thank the Secretary. You have certainly put a now better light on this.

Secretary DOLE. I think much of this is semantics. I really believe communications is one of the things we must strive to improve, because I can just see instance after instance where perhaps a different way of explaining it might have eliminated a lot of confusion. It is a very technical area.

Senator D'AMATO. Well, I commend you for coming forth and asking for those increases in personnel. Again, that hopefully is going to, I think, create better morale with those who are there.

I do think we have a system that has some strains. You recognize that. You respond to it when you can make it better. I think that is what we are about. And to say that everything is fine and does not need constant review and upgrading would be a tragic error.

So I commend you for coming forward with this request, and I also recognize Senator Lautenberg's legitimate concerns for this area, and look forward to working with him.

Mr. Chairman, I have no further questions, and I am going to go on down and vote.

NEAR MIDAIR REPORTS

Senator HARKIN [presiding]. Thank you very much. I will go ahead and hold the chair until Senator Lautenberg gets back.

Madam Secretary, I just had a couple things I wanted to cover with you, one of which I do not seem to have in front of me. The other one had to do with near midairs.

As a pilot myself now for 22 years, having a commercial license, and having flown in most of the air traffic control areas in the United

States, I am amazed at the changes that have come about just in the last few years, in the heavy traffic in some of our areas, obviously Washington, New York, Chicago for instance.

Looking at the near midair reports that have been coming in, I've begun to think that a lot of times we are sort of led astray, or at least the public is, by statistics showing how safe air travel is, and how there have not been any major accidents for a long time, et cetera.

But I think a clearer and better indication of what is happening with our air traffic system in the United States is provided by the number of near midairs that are being reported by pilots, and the increase in the number of near midair reports.

From January through June 1986, there were 390 reported near midairs. From January through June of this year, there were 501, for a 28-percent increase.

For the scheduled airlines on which most of us fly, from January through June 1986, there were 155 reported near midairs. During the same period, January through June of this year, there were 213 reported near midairs, for a 37-percent increase.

I would like to have your views on this situation. Do you find those numbers alarming or do you think they are within acceptable parameters? What does that mean when we have a 37-percent increase in 1 year in the number of near midairs reported by the scheduled air carriers?

Secretary DOLE. Let me say first of all that our numbers show that in 1986 there were 840 near midairs, compared to 758 in 1985.

Senator HARKIN. Say that again.

Secretary DOLE. 840, compared to 758, which would be a 10.8-percent increase, the vast majority being in the no hazard category. In 1987, as of May 31, 1987, there were 401 near midair collision reports, a 26-percent increase over the same timeframe in 1986.

Senator HARKIN. Wait a minute. Why are our figures different? We got our numbers from the FAA office of aviation safety on July 7, 1987.

Secretary DOLE. I do not know. But we have a lot of FAA people here. Maybe we can sort that out. But the number of actual midair collisions has remained relatively constant. And I think we have to put it into perspective.

Senator HARKIN. Madam Secretary, can I interrupt?

Secretary DOLE. Yes.

Senator HARKIN. You are citing numbers for the entire year of 1986.

Secretary DOLE. For 1986, 840.

Senator HARKIN. It was how many?

Secretary DOLE. 840, compared to 758 in 1985. So we have that as an increase of 10.8 percent.

Senator HARKIN. OK. That is from 1985 to 1986, was a 10.8-percent increase.

Secretary DOLE. Yes.

Senator HARKIN. I am talking about from 1986 to 1987. What do you have for the first 6 months of this year?

Secretary DOLE. Well, for 5 months, we have 26 percent. In other words, in 1987, as of May 31, 1987, 401 near midair collision reports, which would be a 26-percent increase over the same timeframe in 1986.

Senator HARKIN. OK, that is from January through when?

Secretary DOLE. May 31, 1987.

Senator HARKIN. Well, see, I have January through June 1987. So I have 501. And you said it was 400 and what?

Secretary DOLE. 401.

Senator HARKIN. So we have had 100 just in the month of June?

Secretary DOLE. These are the statistics that I have. And if we can clarify it, if the panel could clarify that.

Senator HARKIN. OK. I just want to make sure that we get——

Secretary DOLE. This is all the data that I have to work with at the moment.

Senator HARKIN. I see. I think the difference is that you were citing numbers through May, and ours go through June 30, I guess.

STANDARDIZATION OF TERMINAL CONTROL AREAS

Secretary DOLE. But 60 percent of all near midair collision reports involve one IFR and one VFR aircraft. What we have done with regard to small aircraft, there are a number of initiatives. One is we are currently standardizing the TCA's, the terminal control areas, which will make it easier for pilots. Rather than different configurations around the primary airports, they will be standardized. We have also, we are requiring that all aircraft——

Senator HARKIN. Are these the new ARSA's you are talking about?

Secretary DOLE. ARSA's are the next level of restrictions. They are not as restricted as the TCA's, which are the terminal control areas.

Senator HARKIN. Terminal control areas.

Secretary DOLE. Terminal control is where you have the most restrictions, around the busiest airports.

Senator HARKIN. But how are you changing the terminal control areas?

Secretary DOLE. The TCA's, the configurations are different now, around different airports. And we are standardizing, so that you will have, for example, 5, 10, 20 mile radius, rather than different kinds of configurations so that pilots have to learn a different configuration for different airports. This makes it easier for a small aircraft pilot, for example, to know when he is getting into a TCA. We are also taking a stronger enforcement action against pilots who do wander into those TCA's. We are asking that small-aircraft pilots submit their flight plans 4 hours ahead. We will be requiring transponders with altitude encoders for any aircraft in the TCA's. That will be effective by the end of the year.

Senator HARKIN. Wait a minute. Every aircraft has to have an encoding altimeter.

Secretary DOLE. Yes.

Senator HARKIN. To operate within every TCA in the United States. Is that right?

Secretary DOLE. That will be the case by the end of this year. December 1 is when——

Senator HARKIN. Because most of these areas that I am talking about, like Washington and Chicago, you have had to have an encoding altimeter for years.

Secretary DOLE. Yes.

Senator HARKIN. I forget how many years. But at least the last several years, you have had to have an encoding altimeter.

Secretary DOLE. For those two only.

Senator HARKIN. Pardon?

Secretary DOLE. For those two only.

Senator HARKIN. Just Chicago and——

Secretary DOLE. Those two. As of December 1, all TCA's.

Ms. HALE. There were nine TCA's where we required transponders and we are modifying that to expand.

Senator HARKIN. How many years has that been in effect? Several years?

Ms. HALE. Yes.

Senator HARKIN. Because I know I have flown into this area several years ago and I had to have an encoding altimeter.

Secretary DOLE. It is nine rather than two, so then we are also taking comments now, and this comment period will be closed, I believe, August 17 on requiring transponders with altitude 30 miles out from a primary airport as well, 30 miles beyond at certain altitudes. So that comment period will close soon, but that rules out the comment at the moment. So there are a lot of things happening in this area.

Senator HARKIN. So you are saying that in some of these areas you are expanding the horizontal radius and the vertical altitude of the TCA's?

Secretary DOLE. It will mean more airspace, that is right, in a TCA, overall.

Senator HARKIN. Of course, I guess the vertical goes all the way up anyway, in a TCA. How far up?

Secretary DOLE. It varies. But this rule will go to 12,500 feet.

IFR AND VFR AIRCRAFT IN NEAR MIDAIRS

Senator HARKIN. But I still want to get back to the near midairs. You said that 60 percent of the reported midairs, or near midairs, let me use the correct phraseology, near midairs, involved one IFR and one VFR.

Secretary DOLE. Right.

Senator HARKIN. Forty percent involved two IFR aircraft?

Secretary DOLE. Thirty-three percent are VFR–VFR conflicts, two IFR aircraft are only 7 percent of the total. Let us look at this for a moment. We are getting into a considerable amount of detail here which I would rather have the technical experts address.

Senator HARKIN. Do you have any idea how many of the near midairs were by two IFR aircraft?

Secretary DOLE. Seven percent.

Senator HARKIN. Seven percent.

Secretary DOLE. Right.

Senator HARKIN. By aircraft under positive air control.

Secretary DOLE. Right.

Senator HARKIN. That is still very high. Seven percent of scheduled airlines. Well, I do not know if they are scheduled airlines. It could have been other nonscheduled airlines. But 7 percent under positive control had near midairs.

We just had one recently in western Iowa, where two aircraft came very close to one another. One was a military aircraft and one was a civilian airliner.

Secretary DOLE. And of course the near midair reports, this is any pilot says it happened, it is put on the list. I mean, we are trying to encourage reporting, both in the operational errors, the near midairs. And once again, you know, these are good management tools, I think good training tools. We have recently changed the procedures for reporting operational errors, for example.

And I think that what this has done is to mean that you see more. But I do not think anyone should be discouraged from doing that, because, you know, with an operational error, it is just when the 5-mile separation is violated at all, the slightest, smallest bit across that line, it is on the list of an operational error. But it is a good training tool. And it is overall, frankly, infinitesimal in the numbers. There are something like 94 million air traffic operations a year, about 90,000 per day. So the chance of being involved in a near mid-air is infinitesimal, something like one in 2 million. But we have had a task force at work, looking at the increase in operational errors, for example, to determine how some additional teaching tools can be put to good use.

Senator HARKIN. I am sorry. I have to go vote. I just wanted to add that I have a lot of friends who are pilots for the airlines. I have had more than one tell me that what we have now is an air transport system in America that has evolved truly into a mass transport system.

But it does not have the infrastructure and the support for a mass transportation system. And I think that is what we are talking about—making sure that the supporting mechanism is there for a truly mass transportation system.

Secretary DOLE. Yes.

Senator HARKIN. And that is why I am sure the chairman and everyone else is so insistent on increasing the number of air traffic controllers, and upgrading the computers, and everything else.

Secretary DOLE. Right. And the computers, by the way, the host computers are coming in. Seattle already has theirs. The construction is done at Boston and at Chicago. By the end of the year, or certainly by next summer, those host computers will be in all of the centers.

Senator HARKIN. That is good news.

Secretary DOLE. And operational. That will increase, by the way, the capacity is four times current capacity and 10 times the speed.

Senator HARKIN. Those computers have been a long time in coming. Thank you.

Secretary DOLE. Thank you.

Senator LAUTENBERG [presiding]. I am sorry to have to pop out on you like that. But Bob Dole insisted that we vote right then.

Secretary DOLE. I am sorry. I did not hear that.

Senator LAUTENBERG. I said, Bob Dole insisted that we vote right then. [Laughter.]

Secretary DOLE. Well, I hope he is not going to do it again.

ATTAINMENT OF CONTROLLER LEVELS

Senator LAUTENBERG. I do not want to cover any ground that has already been covered. I did hear Senator D'Amato before he left talk about the help that the new staffing might give us for fiscal year 1988.

And I was not sure what your response was, but I do not imagine that the new additions will really have any effect in this fiscal year.

Secretary DOLE. No; this is looking out to fiscal year 1988, that is right, trying to plan ahead. It will also, you know, enable us to undertake two additional centers, with the site-specific radar training that we feel has worked so well in Chicago.

Senator LAUTENBERG. Now, does that mean that we are still presently understaffed, or that we will be for 1988? Or are you satisfied that you have enough people to do the job with the traffic development as it is now?

Secretary DOLE. We are speaking now just of 1988, right? Because in 1987 we are running ahead of our goals.

Senator LAUTENBERG. I am talking about from now, because we only have 3 months left to this fiscal year.

Secretary DOLE. Right, and this year we are, you know, running ahead. The original——

Senator LAUTENBERG. Ahead of what?

Secretary DOLE. Of the goals——

Senator LAUTENBERG. The agreed upon levels?

Secretary DOLE. Yes; the goals were 15,000 at the end of this year, 15,225 by the end of the next fiscal year. We will easily be——

Senator LAUTENBERG. And that in your view is enough to do the job. You have enough FPL's, you have enough traffic management coordinators, you have enough supervisors, you have enough people to do the job.

Secretary DOLE. The goals that were laid out are being exceeded. And the FPL's, let me make one comment on that, and I think it is so important that we work together to ensure that we never skew the system by having arbitrary numbers that could mean managers would have a disincentive to promote full performance level controllers into supervisory positions, into positions of traffic management coordinators, or that they are discouraged from moving people from center to center, from facility to facility.

I mean, that would be terrible, to tie down our FAA in that way. And I really am concerned about that. Because the important thing is that you have a controller who is fully qualified on that sector to sit there and operate the scopes. Then you must have, of course, the supervisors who are not only managing and overseeing the controllers, but who are monitoring the system at that facility, making certain that you have enough controllers for the traffic that is coming through all the rest of it. They are managing on a day-to-day basis. Then it is nice, obviously, to have, you want as many as possible to be full performance, because that gives your manager in that facility more flexibility. The person who is qualified on two sectors but not on all sectors is fully qualified and certified, and as I said earlier, may be the best person to be on that sector. It means he is not yet qualified on every sector.

Senator LAUTENBERG. I understand.

Secretary DOLE. So, yes, it is desirable to keep trying to get your numbers of FPL's up. But not at the expense of filling supervisory jobs or being able to move people from facility to facility in the best management——

OBJECTIONS TO STATUTORY REQUIREMENT

Senator LAUTENBERG. But if this statutory requirement was a problem for you, you say it distorts or eventually impedes FAA's ability to handle traffic as safely and efficiently as possible, is an official view, why did we not hear objections or protests during the year? I mean, I have, going back to last October when Senator Hatfield was the chairman of the committee, a series of memos that passed back and forth that reflected FAA's or the Department of Transportation's amendments so that this ratio looked like it was satisfactory to you.

Ms. HALE. Mr. Chairman, if I may speak to that, because I was a part of those negotiations last year, or at least was very familiar with what was going on.

At any point that we are doing an appropriations bill, and there were strong objections raised at the time to some language, we tried to work with the staff that was there at the time. We had informal conversations and there were memos written that I think you probably got copies of. At the end, when it is one of the last issues that is resolved, is the Congress and the administration are finally signing a continuing resolution. We at that time did sign off on it. We had conversations with the chairman, within the administration. But I think we have learned a lot since then. Yes; we think we will make the 70 percent. Yes; we think we are going to be close on the other goals.

But as we have evolved and learned what kind of pressure that can put on the facilities, I do not think any of us want to deal with——

Senator LAUTENBERG. You see it as pulling from the top. And I see it as filling in from the bottom. There is still going to be a fair amount of debate about whether or not the present staffing of FPL's, regardless of ratio to total persons, is adequate to do the job.

What happened is the Department, I think, has taken a degree of satisfaction out of saying, OK, we have met the numbers that were mandated upon us by the committee, and now, what are you complaining about?

The question really should be, how many people do we need to do the job with the system at its present level, and do we have enough of those? Now, I must tell you, from my standpoint, when I look at the traffic increases, I do not think that we have enough people to presently do the job.

Now that serves only one purpose. I want it to be constructive. But it will not be until we say that there are things that must be changed to meet the requirements on a continuing basis.

And not to have this kind of aberration, where there is total resistance to the increase in numbers, defending the staffing levels, defending the skills levels, and then suddenly to say, hey, wait a second, 2 weeks ago it was this or 5 weeks ago it was that. But now we really do know what we are doing.

Secretary DOLE. Well, I think it is an ongoing review. Always has been and always will be, and should be.

Senator LAUTENBERG. Yes, Elizabeth, that is absolutely true and it should always be.

But you and I know that when you have projects that require long-range planning, and a review takes place that says within a 60-day cycle we have to make a major change like this, there was something wrong with the planning then.

Was it impossible to forecast?

Secretary DOLE. No.

Senator LAUTENBERG. Listen, we do it in government. We do it in business. You have to say, look, I want to look out 4 years.

We have seen the traffic growth. The traffic growth has been enormous. I think it is up almost 50 percent since 1981.

Secretary DOLE. The 1988 budget, it is 18 months that has gone into this. You know, it started back at the end of 1985.

Frankly, I think we are doing exactly what you say is the right thing to do. This is good management, in terms of coming forward before the fiscal year starts and saying, our update, our review shows that we need to amend that budget. We are not even into that budget year yet. But we are trying to look ahead and we are trying to plan. And I hope we can continue to do that.

NATIONAL AIRSPACE SYSTEM PLAN

Senator LAUTENBERG. Let us talk about the NAS plan.

Secretary DOLE. I am sorry?

Senator LAUTENBERG. NAS.

Secretary DOLE. Yes.

Senator LAUTENBERG. The National Air Space system.

Senator LAUTENBERG. How is it that we are designing, developing, procuring equipment, systems based on air traffic projections that extend out 8 years and longer? Is that not the case?

I mean, we are looking very long-term as we do that plan.

Secretary DOLE. The NAS plan is a 10-year plan.

Senator LAUTENBERG. Are you concerned about the kinds of projections that you are getting? Are you concerned about the reliability of the forecasts? Or do you think they are in pretty good shape?

Secretary DOLE. If you are speaking of the procurements and where we are in the NAS plan, let me just visit a minute on that. We are 5 years into the NAS plan. We will have 90 percent of the contracts let by the end of this year. Now, this was the GAO report, I believe, that said there had been 8 to 10 years of delay. Mr. Chairman, the program is only 5 years old. So there is no way there could be 8 to 10 years delay at this point. And there has been some delay, 1 to 2 years, in some instances.

But basically, we have been going through the R&D stage. This is state-of-the-art equipment. Frankly, there have been some overly ambitious schedules and some poor contractor performance. But I asked my deputy——

Senator LAUTENBERG. And poor procurement. There is procurement in the process.

Secretary DOLE. My deputy has been overseeing the NAS procurement process because I felt that it is important that we have that.

Senator LAUTENBERG. Mr. Burnley?

Secretary DOLE. Yes.

Senator LAUTENBERG. He and I had a chance to visit a few weeks ago.

Secretary DOLE. Yes, I know.

Senator LAUTENBERG. It was a private visit in front of 3 million Americans. [Laughter.]

Senator LAUTENBERG. The thing that——

Secretary DOLE. But I have not finished my statement.

Senator LAUTENBERG. Well, I do not want to have you here all day, as charming as it is.

Secretary DOLE. It is the largest nonmilitary project since the Apollo-men-on-the-Moon project. It is a very, very important initiative as far as its impacts on the, say, the controller staffing standards.

You know, it is way down the road when the software is actually in place before it could then begin to impact those staffing standards. So, you know, that is probably the year 2000. There is not that kind of direct relationship now, in terms of——

DEFERRAL OF FUNDS

Senator LAUTENBERG. Right. There has been a procurement process, and that was confirmed by the letter requesting the deferral of $1 billion last year and the year before from being invested in the system.

Secretary DOLE. No; let me go through that full funding concept. When we come up to present our budget on some of the major procurements, and this has been not just this administration, but the Carter administration, other administrations as well have handled it the same way.

We have a multiyear-full-funding budget, which means that we anticipate not only the funding over many years for this major project, but even post-delivery, installation, spare parts. It is all budgeted up front. Now, in two instances and in one case I believe it was about $1.3 billion, $1.35 billion, another year $1.2 billion, in that range. We knew that that would not be spent. In other words, it would be held over. It was anticipated. It was a part of the budget presentation. So it should not come as a surprise.

Senator LAUTENBERG. I am sorry. I always like to listen when you are talking. I am looking for the deferral memo.

But it says in there that the procurement was slower than anticipated. As you know I have said this publicly, and your Department has acknowledged publicly that there are computers resting quietly in a warehouse in Dallas, waiting to be called to duty.

Secretary DOLE. That $17 million is because the software contractor did not produce on time. And as soon as that contractor comes through, we are ready to use the equipment.

Senator LAUTENBERG. And all of us know that without a pilot the plane can not fly. Therefore it is not a good idea to order airplanes before you have pilots, to use an analogy. Same thing here.

I mean, in managing a system like this, it requires an enormous amount of coordination. I do not think that was given appropriate thought in the early design days.

Ms. HALE. Mr. Chairman, may I respond to that?

Senator LAUTENBERG. Briefly.

Ms. HALE. Briefly, we did order that equipment, thinking it was the most cost-effective way to get the hardware as the software was coming, being developed by that same contractor. We also have had direction from Congress on the flight service stations and are working with Congress and within our own agency. So where we think it is cost-effective, where we can get a cheaper price for the hardware, we will be using it. It does make some sense.

Senator LAUTENBERG. Did we pay for that hardware?

Ms. HALE. Yes, sir.

Senator LAUTENBERG. And the same contractor is supplying software and hardware?

Ms. HALE. That is correct, sir.

Senator LAUTENBERG. So why were they not required to deliver it all before we paid for it?

Ms. HALE. We have had some conversations with Congress and the appropriations reports that talk about the type of software we are going to put into those facilities, as we did the consolidation of the flight service stations and we have been trying to work cooperatively with you all on the flight service station modernization effort.

Senator LAUTENBERG. It is very apparent as we talk about the long-range planning for the NAS system, and place a degree of reliability on those forecasts, that somehow or other it does not quite square with the need to adjust the forecast for budgeting for the number of controllers in the current year when we have in fact, I assume, used at least a similar technique for gauging traffic and requirements in the staffing, as we do for the NAS system.

Is that a fair conclusion? I mean, whatever the forecasting technique is, whatever the projection process is, we are using numbers that are saying to us that 8, 10 years hence, this is going to be the requirement for moving all of these passengers and all this equipment.

Ms. HALE. But what we also have in the NAS plan as I think, especially with the help of your committee and our interaction with you, we have divided some of those projects into separate phases. In the advanced automation system, we can divide that contract.

If our long-range forecasts do not quite develop, if the system does not quite develop, we can make modifications. Yes; we have a long-term plan of how we are going to do the NAS plan. We hope that in working with the contractor and working with you, we will all be able to adjust.

Senator LAUTENBERG. Then it looks to me like there is an absence of similar kind of planning, in terms of staffing needs, currently.

We have whatever we have got out there by way of equipment. We have to have the personnel to operate that.

Ms. HALE. But, Mr. Chairman, I think that what we have done with this fiscal year 1988 budget amendment is that we are looking to the long-term. We know we are going to be adding more sectors in the next year or so. We know that we are expanding the ARSA's. We know that we are taking actions that will require more controllers, and that is the long-term planning aspect that we think we have brought to the Congress with this request for additional controllers and support personnel.

SUMMER SAFETY INITIATIVES

Senator LAUTENBERG. I want to just turn for a moment to the summer safety initiatives that you announced on June 11. The opening paragraph of your announcement mentions three actions being taken to further ensure the safety of the traveling public this summer.

The three actions are new traffic management procedures, monitoring the busiest sectors, asking general aviation pilots to file flight plans at least 4 hours before they take off if they intend to fly above 23,000 feet. A lot of pilots fly at lower altitudes than that, including this one.

You are also issuing a notice of proposed rulemaking regarding the use of transponders near busy airports and restrictions on flights through TCA's by student pilots. Certainly the committee applauds any initiatives to enhance the safety margin.

I just have a couple observations I would like to share with you and we will save the technical questions for FAA when they come to the witness table.

My basic concern is that the press release and the follow-on stories create the impression that you have a system in place that does exactly what the NTSB recommends.

The key feature of their class 1 urgent action, active recommendation was that FAA limit traffic until it had the capacity to predict when a sector would be overloaded and then would take corrective action before the problem developed.

Now, is it your intention to say that FAA is in full compliance with the NTSB recommendation?

Secretary DOLE. Yes; the other things that you mentioned are initiatives that have been taken at different points in time.

But in terms of the NTSB's recommendation, I understand their recommendation to be that air sectors should be surveyed to determine where a particular air sector might reach capacity over the summer months when you have delays causing, you know, there is no question 70 percent of the delays are caused by weather. It has been even higher than that in some instances. And we have, you know, the storm season. This is a time when NTSB felt we should be looking at the air sectors to determine when there might be some possible reaching of capacity in the air, not just on the ground.

And that is exactly what the Administrator asked his 20 en route centers to do back on May 4. In other words, each one was to assess their air sectors. There are 652, we are adding another 20. And to determine which ones could reach capacity. And they identified 125. Now, those 125 can change, because we are constantly assessing it. But out of the 125, I believe, yesterday they were looking at 28. The day before, a couple of days before, it was 32. So this is constantly changing. But there were 28 where planes were either being held on the ground, slowed down, or rerouted, which is going to add a little to the delay situation.

But you are making a choice. And the choice will always be safety first, even if it means some delay. And so the metering is taking place, and has been taking place since June 4, though it was announced on June 11. And I believe, Mr. Chairman, that it is absolutely consistent with what the NTSB was seeking to do.

Senator LAUTENBERG. Well, I have their message, their memo that was delivered on May 13 to Admiral Engen.

And it says based on its investigation, the NTSB recommends the FAA take immediate action to reduce the maximum acceptance rates that those airports now monitored by the central flow control facility and place limits on en route flight plan approval to the extent necessary.

I think what they are saying here is designed to reduce the number of schedules so that you do not run into that kind of a problem.

Secretary DOLE. I thought that Chairman Burnett specifically said, or tried to clarify that to say that he was not talking about reducing the number of actual schedules in and out. In other words, he was not talking about additional high-density airports. He was talking about metering the traffic through the air sectors the way that the FAA is doing it.

FLIGHT RESTRICTIONS

Senator LAUTENBERG. But when they say en route flight plan, you have to file a flight plan, as you know, and place limits on those flight plan approvals, it means you are not going to be able to take off at that time from that airport to go to the other airport.

Secretary DOLE. Well, at 28 airports right now, I mean at 28 sectors right now, out of 125 that were identified as possible reaching capacity, there is now in place either rerouting or slowing planes down, or holding them on the ground a little longer in order to make sure that capacity is not reached in that sector. And the airlines are rescheduling also, and that helps. We were concerned that the airlines had too many schedules, as you know.

Senator LAUTENBERG. Right. But again, what I hear you saying is that you would rather hold them on the ground, that makes sense, rather than circling above using fuel.

Secretary DOLE. Oh, I feel very strongly about that, as I believe you do too.

Senator LAUTENBERG. Yes, sure.

Secretary DOLE. This is something that makes a difference now in the way, in other words, prestrike stacking over airports was a common occurrence.

Senator LAUTENBERG. Well, that was the decision then.

Secretary DOLE. And that is not the case today.

Senator LAUTENBERG. There was the change in process after the strike. But the process to hold them on the ground has been in place for some years now and I think it is a good idea.

Secretary DOLE. Right.

Senator LAUTENBERG. But again, what I see NTSB saying, and what I hear you saying are, frankly, different things. You are saying, as it builds up, hold back.

And they are saying, I believe, restrict en route flight plan approvals. That means we are just not going to permit you to load up that sector by more flights than we think or that someone thinks ought to be in that area at that time.

That is what NTSB says but that is not the response I am getting from the Department.

Ms. HALE. I think, Senator, that we do flow control, we are controlling it, we are interacting with the airlines every single day. The airlines have taken steps, as we have worked with them to do some of the rescheduling and rerouting. And again, I think part of the dynamic process is that that is occurring.

Secretary DOLE. And we are in touch with the airlines constantly. There is a continuing dialog every day.

AIRCRAFT SITUATION DISPLAY

Senator LAUTENBERG. Let me ask you this. The aircraft situation display, is that an operating system, in your view?

Secretary DOLE. Yes; it is being utilized now because it is a graphic picture of traffic across the United States.

Senator LAUTENBERG. Yes, right; I saw the pictures.

Secretary DOLE. And as you know, you can zoom in on an airport or a particular portion of an airport. It is a very——

Senator LAUTENBERG. Does it make a material difference in the way traffic is handled?

Secretary DOLE. I think that is very definitely an advantage in the whole flow control, in metering the traffic and we also have the traffic management coordinators in the towers, in the centers. And we are asking for more now to put them into the towers. And they are working with headquarters, with central flow control, utilizing this new tool to meter that traffic very carefully.

Senator LAUTENBERG. Is it fair to describe it as a developmental system?

Secretary DOLE. Well, right now it is about 4 minutes off of real time. That projection will be, that will be available in the fall. But we are not talking about controlling, in other words, this is metering the flow of traffic. That is not necessary to use it as it is being used.

Senator LAUTENBERG. Right now it cannot make a material difference.

Secretary DOLE. It is perfectly reliable.

Senator LAUTENBERG. Yes; I mean, they are still checking out the system. Ultimately it will be an integral part of the whole thing. I think it is a very good idea and that you had to use it, but you had to have this developmental phase first.

But I also would tell you that I do not think, from what I have seen, that this is yet a system that truly makes a difference when you have a 4-minute delay. It was 5 minutes when I was there a couple weeks ago, but now we are down to 4. So we are gaining on it.

But, the fact is that that is an awful long time from real time. I mean, real time, we are talking about an interactive system. We are not talking about that now.

Secretary DOLE. It is not necessary for what the machine is being used for now, which is metering the flow of traffic.

So that is an enhancement that will be available in the fall, but it is fully operational, fully useful for what we are doing now. It is not a matter of working out bugs or anything.

Senator LAUTENBERG. It is part of a manual operating system at this point. Is that not so?

Secretary DOLE. We are getting into technical definitions. I think we need to have our panel come up and take the more technical questions.

Senator LAUTENBERG. OK.

Secretary DOLE. But, clearly it is being utilized now in a very important way. And the 4 minutes real time or not is not essential to what we are using the machine for now.

Senator LAUTENBERG. Yes; because at this moment it is another tool that an operator or a manager will use in making decisions.

This is not an automated thing in the pure sense of the word. It does not trigger off an action automatically while someone stands by as backup and watches this initiate other actions.

That is not where this system is at the present time. It is an information-gathering system to be used in decisionmaking. That is what it is. Do you disagree?

Secretary DOLE. I think you are right on that, but I think it is an extremely impressive development which——

Senator LAUTENBERG. Pac-man is extremely impressive too the first time you see it.

Secretary DOLE. This is something that we are delighted with.

Senator LAUTENBERG. It is very impressive. And when it is a full part of the system, I think it will be very helpful.

I want to ask you just one question and I promise that we will let you go. It concerns the 125 problem sectors you mentioned in your press release.

Secretary DOLE. These are areas which could reach capacity.

Senator LAUTENBERG. Right.

Secretary DOLE. And that may change. I mean, that is constantly being assessed.

Senator LAUTENBERG. I understand. The central flow control was assuming responsibility for monitoring and recommending changes in traffic flows in 44 of those.

Is that correct?

Ms. HALE. That number has changed. It is down, and it changes every day. As the Secretary said, it is 28. It was 44.

Senator LAUTENBERG. There is still a significant number from the 125 level, down to the current level, that is essentially the responsibility of the individual control facility. Is that fair to say?

Secretary DOLE. Yes; the 125 are the ones identified where there could be a reaching of capacity. And then the 28, which is the most recent number, I was using 32, that changed the day before yesterday. It is 28. It could change again.

Senator LAUTENBERG. Well, does that mean that the system is not capable of handling 32, 44, whatever?

Secretary DOLE. No.

Ms. HALE. No.

Secretary DOLE. No; it is just that, first of all, you identify how many blocks of air or air sectors might there be where capacity could be reached. And the 20 en route centers are in the best position to determine that, and they came up with 125. Now that 125 is constantly being assessed. They may decide that there is more or less, depending on the day-to-day evaluation that takes place. Out of the 125, as of right now, there are 28 where they feel some slowing down of aircraft, or perhaps keeping an aircraft on the ground longer——

Senator LAUTENBERG. But can they assess all 125 to say, in a given day, in a given hour, to say this is what we see across the whole system?

Secretary DOLE. The 125 is what they, are the air sectors where they feel there could be——

Senator LAUTENBERG. Could be a problem.

Secretary DOLE. A reaching of capacity. But 28 appears to be the number where they actually slow down or reroute the plane.

Ms. HALE. I also understand that of those additional sectors, about 80 to 88 are monitored by the centers because their arrival or departure——

Senator LAUTENBERG. Individual control facilities.

Ms. HALE. Yes.

Senator LAUTENBERG. In terms of your appearance, I am grateful for your taking so much time with us.

Secretary DOLE. Yes, sir.

Senator LAUTENBERG. We will continue to be in touch.

Secretary DOLE. I look forward to working with you.

Senator LAUTENBERG. Thank you very much.

Secretary DOLE. Thank you.

SUBMITTED QUESTIONS

[The following questions were not asked at the hearing but were submitted for response for the record:]

QUESTIONS SUBMITTED BY SENATOR LAUTENBERG

FAA PROCESS FOR DETERMINING STAFFING NEEDS

Senator Lautenberg. Madam Secretary, in your letter announcing this budget amendment, you say that it is based on an "exhaustive reassessment" which was made over the past 3 months. However, the subcommittee staff was informed that the amendment is really the result of a major overhaul of FAA's system for determining its staffing requirements. Moreover, this process is still incomplete but has been going on for almost 2 years. Was the Department aware that FAA's system for determining staffing requirements needed to be substantially improved?

Answer. The Department was aware that FAA's method of determining its staffing needs was under review.

Senator Lautenberg. If you knew that, what allowances were made for the inadequacies?

Answer. The Department budgeted for some 500 positions in excess of the staffing standards to allow for a training pipeline.

CONTROLLER STAFFING AND AIR TRAFFIC FORECASTS

Senator Lautenberg. You just testified that, in the past, the traffic forecasts slightly overstate actual levels. Following the logic you presented for this amendment, that would mean that you over hired in the past. Do you agree with that?

Answer. It is possible that the actual level of traffic in some prior years was slightly lower than the projections on which FAA based their budget request and hiring plan. However, because the level of hiring during the budget year was tied to the forecasted traffic for that year, the production of trained controllers lagged behind the traffic growth.

Senator Lautenberg. Does this mean we have more controllers than necessary now?

Answer. We do not have more controllers than necessary now. The lag between when controllers are hired and when they become operational has resulted in a self correcting mechanism when the level of traffic growth is relatively stable from year to year.

SUPERVISORS AND TRAFFIC MANAGEMENT COORDINATORS

Senator Lautenberg. Your budget amendment includes $7.1 million for 140 first line supervisors and $9.1 million for 175 traffic management coordinators (TMCs). Sixty of the supervisors and 83 of the TMC's are to fill positions that are either vacant or filled on a temporary basis at present. (Note: First line supervisors have very important responsibilities in coordinating, assisting, and overseeing controller work load, TMC's have a critical role in helping to coordinate and meter traffic flows between control facilities.) Given the importance of the function performed by the first line supervisors and TMC's, why were these vacancies allowed to develop?

Answer. Many of these vacancies developed because we gave first priority within available funds to hiring controllers.

Senator Lautenberg. Why weren't the funds necessary to fill these vacancies included in the original FY 1988 budget? Surely you knew they existed, didn't you?

Answer. At the time we were preparing our FY 1988 budget it was not clear that we would be exceeding our FY 1987 end of year controller work force levels. Some 200 of the positions we are funding are existing positions that have not been filled in FY 1987, but would have been filled in FY 1988, but for the accelerated hiring of controllers this year. With a higher than planned on board strength in controllers going into 1988, we will require additional resources to fill the supervisory jobs.

Senator Lautenberg. I understand that supervisors and traffic management coordinators are classified as overhead. Therefore, they were subject to ceiling and even cuts required by the Administration for budgetary purposes. Is that correct?

Answer. Supervisors and traffic management coordinators were never classified as overhead. We were careful to use the term "Other Than Controller Work Force" when referring to these employees to preclude the impression that they did not contribute directly to traffic control. Controller workforce positions and supervisory positions, as well as all other FAA positions are included within FAA's total full time equivalent ceiling.

Senator Lautenberg. What is your justification for not including them as part of the controller work force and thereby protect them from the cuts, since you do include Academy trainees and air traffic assistants who don't control traffic as part of that workforce.

Answer. When the term controller workforce was initially applied to a portion of the controller population it was never intended to be a controlling mechanism for staffing levels. It was not until specific minimum levels were mandated that the definition became an operational problem. The FAA Administrator has always had discretion as to distribution of his employment target within a general guideline that in making cuts he should protect aviation safety.

Senator Lautenberg. Supervisors and TMC positions are filled by promoting full performance level controllers, as I understand it. So the 175 additional TMC's and the 140 or so additional first line supervisors included in this amendment will have to come from the ranks of FPL controllers, isn't that right?

Answer. That is correct.

Senator Lautenberg. How will you offset the loss of FPL controllers?

Answer. We are constantly producing new FPL controllers as developmental and trainee controllers progress through the training program. The requirement to fill the supervisor and TMC positions will affect the net increase in FPL controllers next year. It will be at least two years more before we can actually offset this loss, but in the meantime, these people will still be contributing to the system in a major way.

MANDATED FPL CONTROLLER LEVELS

Senator Lautenberg. Madam Secretary, you are apparently opposed to the statutory requirement that FAA achieve certain levels of FPL controllers this fiscal year. You claim that it causes distortions that "eventually impede FAA's ability to handle traffic as safely and efficiently as possible." That is a rather strong allegation. If that is the official view of the Department, what is the evidence for this? Please submit the supporting documentation for the record.

Answer. A statutory requirement to achieve certain levels of FPL controllers is an impediment to FAA's management of its personnel resources. Evidence of this is reflected in the inability of specific facilities to obtain employee release dates for transfers until after the end of the fiscal year, the detailing of controllers into positions that normally would be filled on a permanent basis, and the use of temporary promotions to fill supervisory personnel slots until such time as the person selected for the job can be released from the losing facility.

SUMMER SAFETY INITIATIVES

Senator Lautenberg. A key feature of the Safety Board's Class I urgent action recommendation was that the FAA limit traffic until it had the capability to predict when a sector would be overloaded and would take corrective action before the problem developed. Is it your intention to state that FAA is in full compliance with the NTSB recommendation?

Answer. The FAA has several ongoing programs that identify and limit the number of aircraft entering the air traffic system. We believe we are satisfying the intent of the NTSB recommendation; however, as it is with all programs, it is our intention to continue to enhance our capabilities as the state-of the-art allows.

Senator Lautenberg. When you made your announcement were you aware of the facts that:

(1) The aircraft situation display, which allows FAA to get a picture of air traffic en route, was a "developmental system;"

(2) That the scope of problems it was intended to control had not even been completely identified;

(3) That it did not have and still doesn't have any back-up or redundancy?

Answer. The ASD was in the developmental and testing stage for several months prior to its operational use. It became an operational function after several weeks of verification and validation with a comparison to live traffic.

The Federal Aviation Administration had initiated at the field level a thorough review and identification of traffic loadings which resulted in the Sector Traffic Management Program. The aircraft situation display was only one method employed in this new program. The aircraft situation display does not have back-up or redundancy. This will come about as the program is enhanced.

Senator Lautenberg. Of the 125 problems sectors mentioned in your press release, Central Flow Control was assuming responsibility for monitoring and recommending changes in traffic flows in only 44 of them. That means that 81 are still the responsibility of the individual control facility. Since monitoring traffic levels and taking corrective action always has been a routine responsibility of each facility, what is new about this "initiative" with respect to these 81 sectors?

Answer. The procedures now being employed by facilities, under the Sector Traffic Management Program, are both time and sector specific preplanned strategies versus the previous tactical to reactionary approach in achieving operationally acceptable traffic levels.

NAS PLAN STAFFING

Senator Lautenberg. Is there a plan that shows the relationship between FAA's staffing needs projections and the NAS Plan implementation schedule? If not, when will the department and FAA have one? If so, please provide it for the record.

Answer. The System Engineering and Integration (SEI) contractor maintains baselined and controlled data bases which directly relate NAS Plan project schedules to their effect on the cost of FAA operations. A description of this activity follows.

Air Traffic (AT) Staffing and Benefits

The AT benefits are tied to NAS Plan project estimates of AT productivity gains as a function of the schedule improvements. The AT benefits and resulting staffing levels are computed at an extremely detailed level, including the breakdown into 60 organizational titles (covering the three options: centers, terminals, Flight Service Stations), and for approximately 800 sites. The data reported on that detailed level in computer printouts can be summarized, for example, as shown in the attached pages from the annual update to the NAS Plan.

The SEI contractor predictions of AT staffing and benefits levels are made available to the FAA AT planning organizations for use in budget preparation. The agreement between the predicted AT staffing levels and the budgets has been good (2 percent in short term and 5 percent in long term through 1992).

Airway Facilities (AF) Staffing and Benefits

The SEI contractor also tracks field maintenance workload associated with 30,000 equipments as scheduled by annual project implementations. The Airway Facilities staffing estimates are developed using this data in collaboration with the FAA for the purpose of budget preparation. The SEI contractor, as a participant in the FAA's Airway Facilities Staffing Standards Control Team, incorporates approved changes or modifications to the workload estimates of affected facilities.

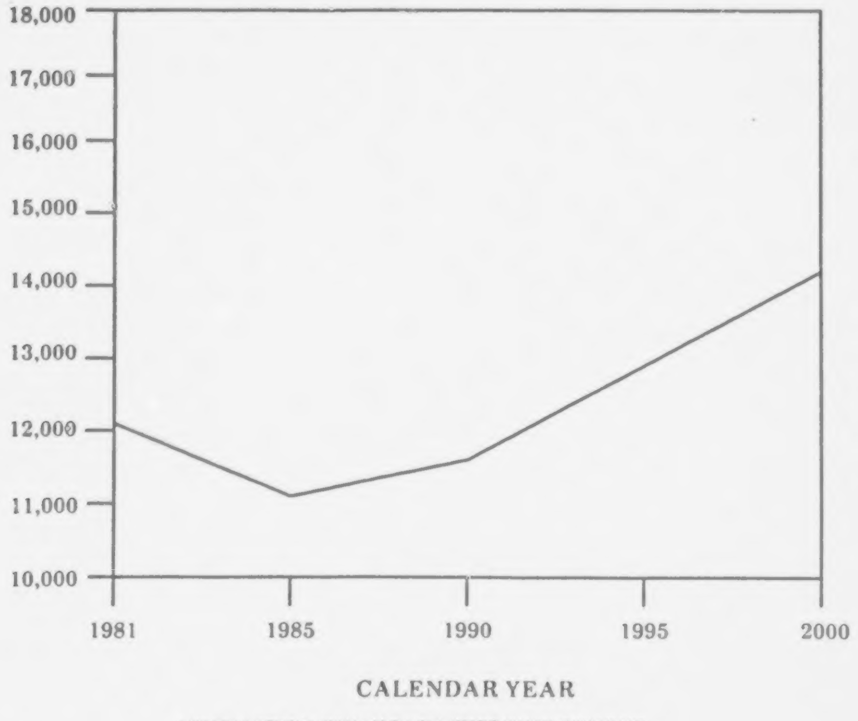
Summary level staffing projections are provided in the annual update to the NAS Plan. Pages from the 1987 NAS Plan have been extracted and are included in the response to the question above.

RETURN ON THE INVESTMENT

As a result of these planned actions, an upgraded air traffic control system will have been implemented. This will serve as the basis for significant improvements in air safety and will provide the reliability and flexibility necessary for further automation. These system improvements will allow for reductions in maintenance staffing and a slower growth in the number of air traffic controllers than would otherwise occur.

FIELD EMPLOYMENT

During the next 13 years, the en route system will undergo numerous changes in hardware, software, and plant improvements. These changes will affect both Air Traffic and Airway Facilities employment as shown in the chart below:



AIR TRAFFIC/AIRWAY FACILITIES EMPLOYMENT
(EN ROUTE/ACF SYSTEMS)

SUMMARY OF FACILITY CHANGES

1981–Airway Facilities (AF) and Air Traffic (AT) employment required a total of 12,124 people.

1985–Air Traffic employment decreased to 9,125 principally because of reductions made possible by enhancing the direct access radar channel (DARC) and resectoring en route airspace. A total AT and AF work force of 11,109 was required to operate and support facilities.

1990–Airway Facilities employment will decrease due to the replacement of the central computer complex and other equipment within the ARTCC.

2000–Air Traffic employment is estimated to increase to 12,520. This apparent increase, however, is offset by the decrease in employees previously required for terminal radar approach controls (TRACON). The total AT employment for en route and terminal facilities will actually decrease from 20,150 (in 1990) to 17,290 due to consolidation of terminal and enroute operations into area control facilities and the capabilities of advanced automation.

Outyear estimates are reviewed annually and are subject to revision.

EN ROUTE/ACF SYSTEMS
AIR TRAFFIC/AIRWAY FACILITIES EMPLOYMENT CHANGES AND CORRESPONDING PERSONNEL COSTS

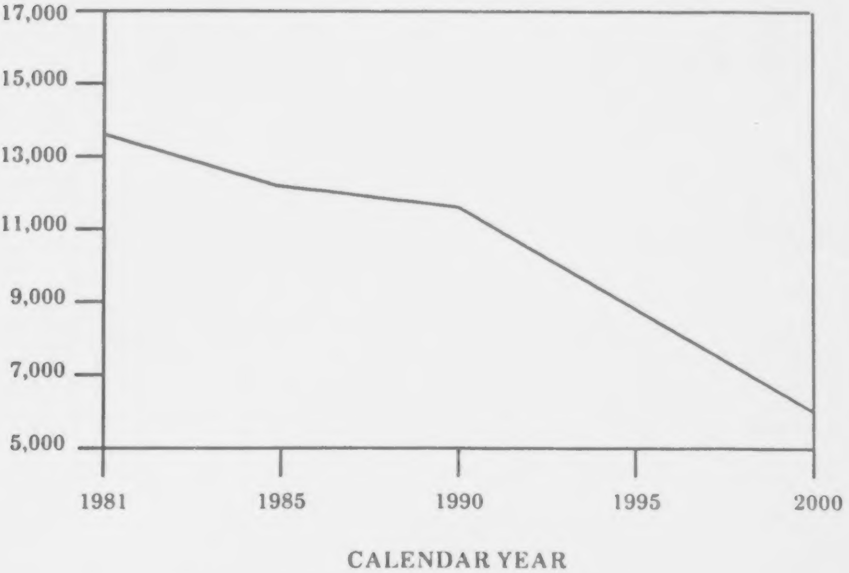
	1981	1985	1990	2000
Operations (Millions)	27.3	32.7	38.7	47.2
Air Traffic Personnel	10,300	9,125	9,990	12,520
AT Productivity Quotient	2,650	3,584	3,874	3,743
Airway Facilities Personnel	1,824	1,984	1,644	1,508
AF Productivity Quotient	14,967	16,482	23,540	31,300
Total AT & AF Staffing	12,124	11,109	11,634	14,118
Air Traffic Personnel Costs (Thousands)	$368,740	$326,675	$357,642	$420,766
Airway Facilities Personnel Costs (Thousands)	$62,198	$67,654	$56,060	$51,423

RETURN ON THE INVESTMENT

During the next 13 years, terminal equipment will be significantly improved and comparable capabilities will be provided to the ACFs and ATCTs in a cost-effective manner. The reliability of the services which terminal systems provide will significantly improve. System capacity will be increased by the implementation of automated aids which reduce controller workload. Fuel efficiency will be maximized consistent with sustained flight safety.

FIELD EMPLOYMENT

These changes will result in changes within both Air Traffic and Airway Facilities field employment as shown in the chart below. The net effect will be a decrease in Airway Facilities personnel requirements at FAA field facilities by 37 percent and a decrease in the 1981 Air Traffic personnel requirements by 60 percent by the year 2000. However, this is partially offset by the increase in staffing described in the en route section. The total terminal and en route air traffic controllers staffing decreases by 22 percent.



AIR TRAFFIC/AIRWAY FACILITIES EMPLOYMENT
(TERMINAL SYSTEMS)

SUMMARY OF FACILITY CHANGES

1981 - Airway Facilities and Air Traffic required 13,649 people to operate terminal facilities.

1985 - AF employment increased slightly. Solid-state conversion resulted in a decrease in electronic and environmental equipment maintenance workloads, but was offset by the establishment of additional BRITE, ATCT, and ARTS facilities. AT staffing requirements were reduced to 10,321 positions due to facility eliminations, transfer of seven non-radar approach control facility functions to ARTCCs, and terminal position review.

2000 - There will be considerable reductions in both AT and AF staffing due to the consolidation of TRACON operations into area control facilities and the resulting decommissioning of terminal automation and broadband radar display equipment. In 2000, total field staffing to operate and support terminal facilities will be down to 5,939.

Outyear estimates are reviewed annually and are subject to revision.

TERMINAL SYSTEMS AIR TRAFFIC/AIRWAY FACILITIES EMPLOYMENT CHANGES AND CORRESPONDING PERSONNEL COSTS

	1981	1985	1990	2000
Operations (Millions)	61.6	57.9	65.7	82.2*
Air Traffic Personnel	11,800	10,321	10,160	4,770
AT Productivity Quotient	5,220	5,610	6,467	17,232
Airway Facilities Personnel	1,849	1,885	1,568	1,169
AF Productivity Quotient	33,315	30,716	41,900	70,317
Total AT & AF Staffing	13,649	12,206	11,728	5,939
Air Traffic Personnel Costs (Thousands)	$351,640	$306,534	$301,752	$141,669
Airway Facilities Personnel Costs (Thousands)	$63,051	$64,279	$53,469	$39,863

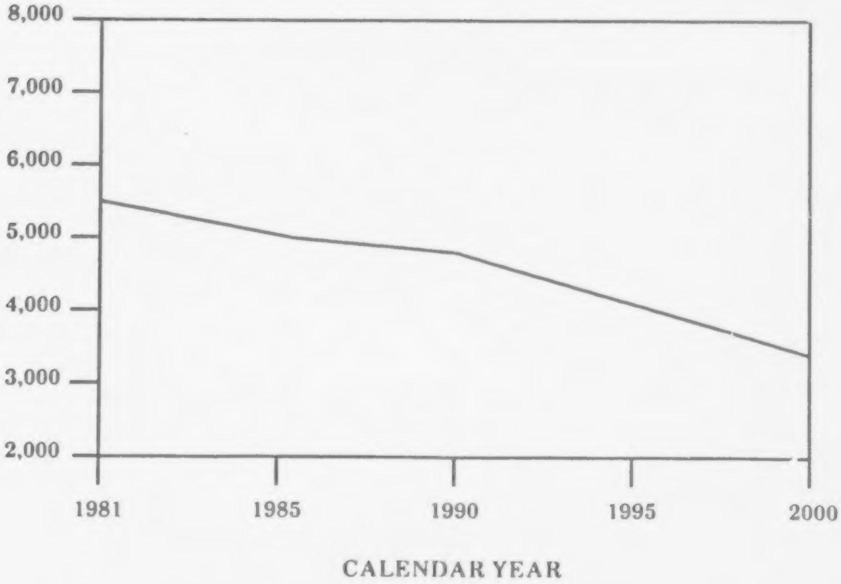
*Tower services only. Approach and departure control services will be performed by area control facilities.

RETURN ON THE INVESTMENT

As a result of these planned actions, FAA operations costs will be significantly reduced; productivity will increase; and, most important, FAA's service to the user will be substantially improved.

FAA FIELD EMPLOYMENT

By the year 2000, these changes will result in decreases of 28 percent in Airway Facilities personnel requirements and 40 percent in Air Traffic personnel requirements from the 1981 levels. Estimates of Air Traffic employment in the year 2000 are based upon new studies which indicate that 70 percent of the demand for FSS services will be accommodated by the automated systems. Previous years' estimates were based on automated systems accommodating 90 percent of demand.



AIR TRAFFIC/AIRWAY FACILITIES EMPLOYMENT
(FLIGHT SERVICE STATIONS)

SUMMARY OF FACILITY CHANGES

1981 – Airway Facilities and Air Traffic employment for 979 facilities required a total of 5,487 people.

1985 – Air Traffic employment decreased to 4,553 due to the interim voice response system and the consolidation of manual flight service stations into automated stations. Airway Facilities staffing has decreased due to these consolidations and the conversion to solid-state equipment.

1990 – Airway Facilities employment will decrease due to facility consolidation and replacement of tone control equipment.

2000 – Decreases in Air Traffic staffing will occur due to the widespread acceptance of automated flight services. Despite the expansion of weather systems there will be a small decrease in Airway Facilities staffing. A total field work force of 3,370 will be required to operate and support FSS/weather facilities.

Outyear estimates are reviewed annually and are subject to revision.

FLIGHT SERVICE SYSTEMS
AIR TRAFFIC/AIRWAY FACILITIES EMPLOYMENT CHANGES
AND CORRESPONDING PERSONNEL COSTS

	1981	1985	1990	2000
Operations (Millions)	62 6	52 9	49 3	56 3
Air Traffic Personnel	4,671	4,553	4,250	2,780
AT Productivity Quotient	13,402	11,619	11,600	20,252
Airway Facilities Personnel	816	625	603	590
AF Productivity Quotient	76,716	84,640	81,758	95,424
Total AT & AF Staffing	5,487	5,178	4,853	3,370
Air Traffic Personnel Costs (thousands)	$127,051	$123,842	$115,600	$75,616
Airway Facilities Personnel Costs (thousands)	$27,826	$21,313	$20,562	$20,119

RETURN ON THE INVESTMENT

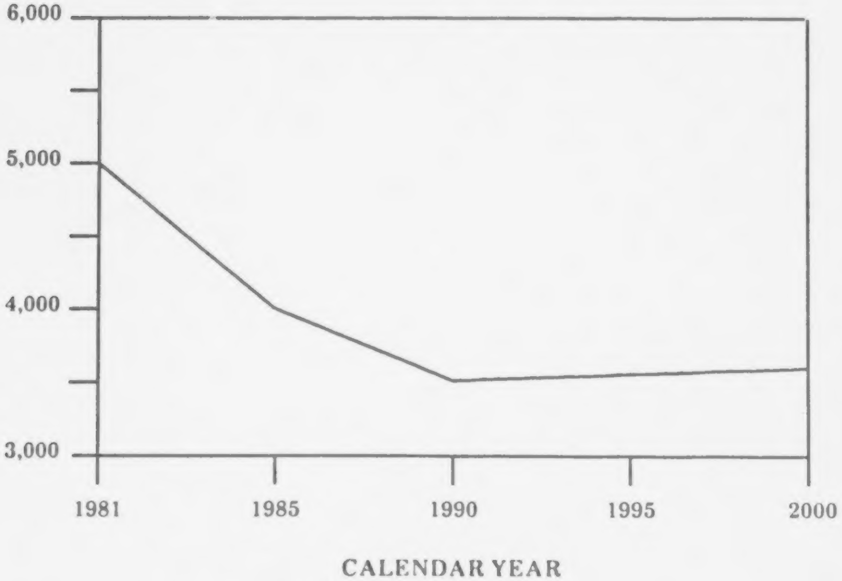
As a result of these planned actions, major improvements in service, system availability, and extended reliability will be achieved; and operating costs will be substantially reduced.

FIELD EMPLOYMENT

Employment levels reflect Airway Facilities sector manager and subordinate positions required to staff the ground-to-air system. Air Traffic employment is not required for these remote systems.

During the next 13 years, the ground-to-air system will undergo changes in hardware, software, and plant improvements. These will result in changes within Airway Facilities as shown in the chart below.

For this system, changes since 1981 will have the net effect of decreasing current Airway Facilities personnel requirements at FAA field facilities by 28 percent in the year 2000.



AIRWAY FACILITIES EMPLOYMENT
(GROUND-TO-AIR SYSTEMS)

SUMMARY OF FACILITY CHANGES

1981 – Airway Facilities employment for 11,640 facilities required a total of 5,057 people.

1985 – The reduction of Airway Facilities staffing has been due primarily to the implementation of VORTAC replacement, solid-state ILS, ground-to-air communications equipment replacement, and installation of remote maintenance monitoring. This has reduced personnel requirements to 3,985 positions.

1990 – Airway Facilities employment will continue to decrease during this time period in spite of the additional number of facilities established, such as MLS, NEXRAD, visual aids, airport surveillance radar (ASR), airport surface detection equipment (ASDE), VHF omnidirectional range test (VOT). Facility establishment increases in personnel will be offset by consolidation of facilities, replacement of vacuum-tube equipment with solid state, and remote-maintenance monitoring.

2000 – Staffing requirements through the year 2000 will experience a net increase due to TDWR, but are also offset by additional consolidation of facilities, reduction of facilities through networking, and the ultimate decommissioning of conventional ILS.

Outyear estimates are reviewed annually and are subject to revision.

GROUND-TO-AIR SYSTEMS
AIRWAY FACILITIES EMPLOYMENT CHANGES AND CORRESPONDING PERSONNEL COSTS

	1981	1985	1990	2000
Operations (Millions)	151.5	143.5	153.7	185.7
Airway Facilities Personnel	5,057	3,985	3,532	3,619
AF Productivity Quotient	29,958	36,010	43,516	51,313
Airway Facilities Personnel Costs (thousands)	$172,444	$135,889	$120,441	$123,408

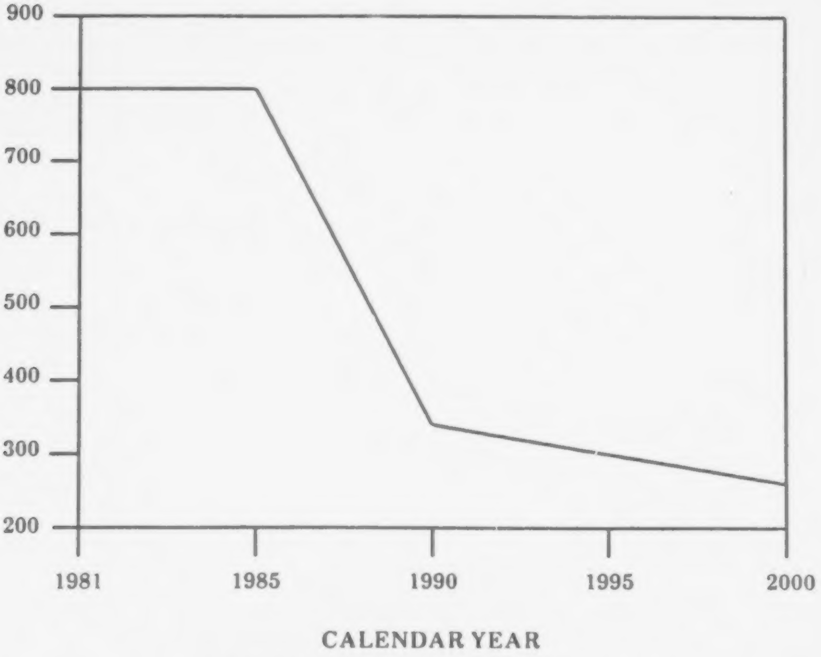
RETURN ON THE INVESTMENT

As a result of these planned actions, overall agency operating costs will be significantly reduced. The introduction of new technology will allow for a decrease in maintenance staffing despite the expansion of FAA-owned facilities to reduce reliance on leased systems. Leased service costs will be contained, and a more reliable and flexible data and voice transmission system will be available.

FIELD EMPLOYMENT

Employment levels reflect the Airway Facilities sector management and subordinate positions required to staff the interfacility system. Air Traffic staffing is not required for this system.

During the next 13 years, the interfacility system will undergo changes in hardware, software, and plant improvements. These changes will be reflected within Airway Facilities as shown in the chart below.



AIRWAY FACILITIES EMPLOYMENT
(INTERFACILITY COMMUNICATIONS SYSTEMS)

The changes planned through the year 2000 will decrease current Airway Facilities personnel requirements for maintenance of interfacility systems at field facilities by 66 percent.

SUMMARY OF FACILITY CHANGES

1981 - A total of 799 field airway facilities technicians were required to maintain the interfacility communications systems.

1985 - High-speed data multiplexing has reduced the number of leased circuits needed to provide long-range radar data to en route centers. Improvements to the RML system have reduced maintenance tasks. Integrated communications switching systems (ICSS) are being installed at towers, TRACONs, and the initial automated flight service stations. The telecommunications management system was upgraded. The teletypewriter replacement program has substantially replaced approximately 350 labor-intensive installations with modern leased terminal equipment. Staffing has increased slightly; however, due to additional communications and TML links, maintenance of the NADIN concentrators and transition to leased teletype replacement systems.

1990 - Additional high-speed data multiplexing will be added, the initial National Airspace Data Interchange Network NADIN IA will be implemented, vacuum-tube RML equipment will be replaced with solid-state RCLs, various RCL systems will be interconnected to form a national network, and about 40 additional television microwave links will be added to provide radar data to satellite towers. Staffing requirements will be reduced to 346.

2000 - Facility consolidation, continued expansion of NADIN functions and the RCL network, NADIN II will be implemented, and replacement of leased voice switching systems with agency-owned equipment will continue to reduce overall staffing and operating costs.

Outyear estimates are reviewed annually and are subject to revision.

INTERFACILITY COMMUNICATIONS SYSTEMS AIRWAY FACILITIES EMPLOYMENT CHANGES AND CORRESPONDING PERSONNEL COSTS

	1981	1985	1990	2000
Operations (Millions)	151.5	143.5	153.7	185.7
Airway Facilities Personnel	799	804	346	274
AF Productivity Quotient	189,612	178,483	444,220	677,737
Airway Facilities Personnel Costs (Thousands)	$27,246	$27,416	$11,799	$9,343

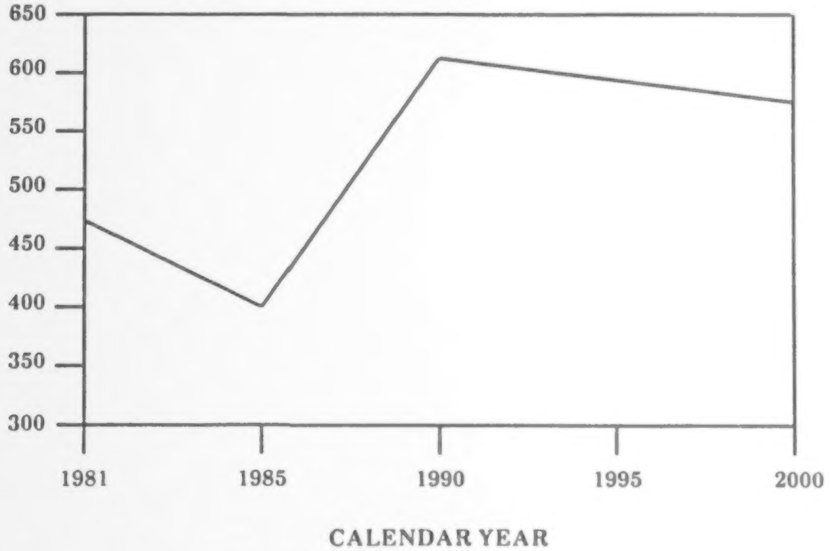
RETURN ON THE INVESTMENT

As a result of improvements to maintenance operations, power systems, structures, aircraft, and facility consolidations, the FAA will be able to provide a variety of new and improved services with significant reductions in both overall staffing and total operating costs.

FIELD EMPLOYMENT

During the next 13 years, the maintenance and operations support system will undergo significant changes in hardware and plant improvements which will result in a more efficient maintenance work force. The apparent increase in staffing for the maintenance operations and support system beyond 1985 is primarily due to the implementation of RMMS and maintenance control centers. Although manpower requirements increase in the programs covered here, the overall Airway Facilities staffing reflected in other chapters of the Plan will show a marked decrease due, in large part, to the implementation of the remote maintenance monitoring concept. MCCs are the nucleus of the remote maintenance monitoring system.

Employment levels shown below reflect Airway Facilities sector manager and subordinate positions required to staff the maintenance and operations support system. Air Traffic, FAA Academy, and national field support group staffing are not included in this data.



AIRWAY FACILITIES EMPLOYMENT
(MAINTENANCE AND OPERATIONS SUPPORT SYSTEMS)

SUMMARY OF FACILITY CHANGES

1981 - The employment level supporting the maintenance and operations support program was 473.

There were 115 AF sector offices in operation.

1985 - Staffing has been reduced to 401. The reduction is a result of replacing engine generators with batteries at facilities that have had vacuum tube equipment replaced with solid state, and reduction in the number of site visits required to maintain the facilities.

1990 - Staffing levels will increase to 607 to provide 24-hour coverage for the ARTCC maintenance control centers. Remote maintenance monitoring and control functions will be consolidated at the MCCs, allowing an overall decrease in total maintenance staffing requirements.

AF sector offices will be reduced from 82 to 75.

2000 - Staffing levels will decrease to 575. Fully implemented RMM and MCC facilities, in conjunction with the completion of solid state equipment replacement and facility consolidations, will result in an overall reduction in AF staffing from 10,818 in 1981 to 7,735 in the year 2000.

AF sector offices will be reduced to 65.

Outyear estimates are reviewed annually and are subject to revision.

MAINTENANCE AND OPERATIONS SUPPORT SYSTEMS AIRWAY FACILITIES EMPLOYMENT CHANGES AND CORRESPONDING PERSONNEL COSTS

	1981	1985	1990	2000
Operations (Millions)	151.5	143.5	153.7	185.7
Airway Facilities Personnel	473	401	607	575
AF Productivity Quotient	320,296	357,855	253,213	322,957
Airway Facilities Personnel Costs (Thousands)	$16,129	$13,674	$20,699	$19,608

QUESTIONS SUBMITTED BY SENATOR KASTEN

Question. I note in your statement that even though you agree that more personnel are needed in the ATC function, that statutory targets may distort traffic management and may impede safety. In the reauthorization of the FAA's major programs recently addressed in the Commerce Aviation Subcommittee there was a target of 1,000 additional controllers, I believe. Is this the target that you are referring to and what negative effects do you foresee as a result of this target number?

Answer. The target of 1,000 additional controllers was not the statutory target that concerned us. We were concerned about the targets in the Appropriations Bill which prescribed specific levels of FPL and Operational controllers.

Question. I know that you have also commenced a rulemaking perhaps leading to some disclosures relative to airline consumer information practices. Where does that rulemaking stand and what practices are you now investigating?

Answer. The public comment period for the airline service rulemaking closed on July 10, 1987. We are currently reviewing the many comments received and we hope to take further rulemaking action shortly.

The Department is currently conducting a number of formal and informal investigations of airline practices. Formal investigations of airline scheduling practices and flight delays are currently underway for the following airports and airlines:

Airport	Airlines
Atlanta Hartsfield	Delta, Eastern
Boston Logan	American, Continental, Delta, Eastern, Piedmont, USAir
Chicago O'Hare	American, United
Dallas-Ft. Worth International	American, Delta

A formal investigation of airline computer reservation system practices is also underway.

Informal investigations are being conducted in a number of other areas. For example, airline supplied data are being reviewed to establish if flights are being cancelled for purely economic reasons. This investigation also involves on-site inspections by DOT staff to substantiate the accuracy of the airline data.

The DOT complaint data for a number of airlines are also being reviewed to establish if there are any patterns of airline practices similar to those covered in our settlement with Continental Airlines. Complainants are being contacted to establish if, in fact, there is evidence of patterns of violations of our requirements in such areas as denied boarding compensation for oversales, refunds and code-sharing arrangement disclosure. If patterns of violations are established, enforcement action will be pursued.

Question. I don't want to re-regulate the industry, but something has to be done to restore service and assure the system's safety. I commend the imposition of fines as a way to get the attention of the airlines. How are the amounts of the fines determined and do you foresee more such fines coming in the near future?

Answer. Section 901 of the Federal Aviation Act provides for civil penalties for violations of the Act and the DOT economic regulations and orders issued under the Act. The section provides for up to a $1,000 civil penalty for each violation and up to $1,000 per day for each continuing violation.

We take a number of factors into consideration in determining the civil penalty we would seek or settle for in an enforcement case. Among the factors we consider are the following:

(1) The number of violations.
(2) How long the violations continued, especially after the company management became aware of the violations.
(3) The harm caused by the violations, as well as steps taken to reimburse passengers or otherwise correct the harm.
(4) Whether the violations were inadvertent or deliberate.
(5) Past enforcement history of the alleged violator.
(6) Compliance attitude of the alleged violator. How quickly was the situation corrected once brought to the company's attention? How much money was spent by the company to correct the situation (e.g., for training, new equipment acquisitions, hiring etc.)
(7) Ability of the alleged violator to pay.
(8) Past history of CAB and DOT in assessing penalties for similar violations, taking into account inflation.
(9) Experience level of the alleged violator (e.g., new airline or established carrier).
(10) Need to eliminate any profits created by violations.
(11) Any valid excuses for the violations which were beyond the control of alleged violator.
(12) In the event of a settlement -
    (a) The strength of our case; and
    (b) The cost to the government of prosecuting the case through a formal hearing proceeding.

The Department is investigating complaints concerning virtually all of the major airlines in a number of areas in which we have specific consumer requirements. At present, we are reviewing our complaint records to establish if there are patterns of violations of our refund rules, denied boarding compensation requirements (which apply in the case of oversales), smoking restrictions, and our rules that require airline reservation agents to disclose code-sharing arrangements with commuter airlines to prospective passengers. Our investigators have independently obtained information on airline compliance with our code-sharing disclosure rule. Within the next 6 to 8 weeks, we expect to complete our review and decide against which airlines to pursue enforcement action.

It is premature to estimate what the investigations will reveal or the magnitude of any fines or settlements that might result. This depends on our evidence gathering efforts and whether the alleged violators are willing to settle or force us into protracted litigation.

FEDERAL AVIATION ADMINISTRATION

STATEMENT OF KEITH B. POTTS, ASSOCIATE ADMINISTRATOR FOR AIR TRAFFIC

ACCOMPANIED BY:

DALE E. McDANIEL, DEPUTY ASSOCIATE ADMINISTRATOR FOR POLICY AND INTERNATIONAL AFFAIRS

WILLIAM HENDRICKS, DIRECTOR, OFFICE OF AVIATION SAFETY

NORBERT OWENS, DEPUTY ASSOCIATE ADMINISTRATOR FOR AIR TRAFFIC

INTRODUCTION OF WITNESSES

Senator LAUTENBERG. The next witness panel is Keith Potts, Associate Administrator for Air Traffic; Dale McDaniel, Deputy Associate Administrator for Policy and International Affairs; William Hendricks, Director of the Office of Aviation Safety; and Michael Sherwin, Director of the Office of Management Systems.

Mr. POTTS. This is Mr. Norbert Owens, my deputy, in place of Mr. Sherwin, the Deputy Associate Administrator for Air Traffic.

Senator LAUTENBERG. We are pleased to have you with us. And I would have to say in our visit, Mr. Potts, and the communications between your office and mine, it has been very forthright.

I know that your mission is to get the system to as high level of safety and efficiency as possible. I also know that your people work very, very hard.

There's a lot of very sophisticated design that's gone into the system thus far. As you heard, and as you know from our discussion, I feel that it has got a longer way to go than does the Secretary respectfully acknowledge.

And when we discuss issues like real time, the terminology can only mean one thing to a professional, and that is essentially interactive. If it is real time, it is communicating almost instantaneously messages to other parts of the system.

So as we review some of the problems that I see, I want you to understand that it is intended to get behind us as much as we can the problems that have existed, and to look to the future to see what it is that we are trying to accomplish, and where we realistically are.

I really do think that we are better off to have a very clear understanding of what is taking place at this time, and that we ought not, in our view, to believe that simply because it is a nice display and it is a sophisticated piece of work that it satisfies our need.

I do not see that happening. So I invite you to give your testimony. Do you have an opening statement?

Mr. POTTS. No; I do not have an opening statement other than to say that I am happy to be here today, Senator, and will be pleased to answer any questions that you have.

We would like to let the Secretary's statement suffice for the record, and we will not add to that in the interest of time.

Senator LAUTENBERG. Mr. Potts, as Associate Administrator of Air Traffic, it is your job to keep the air traffic control system operating, and in that regard, to determine your staff and resource needs.

Mr. POTTS. That is correct.

NEED FOR CONTROLLERS

Senator LAUTENBERG. Let us go over the system for determining how many controllers, supervisors, TMC's you need.

Mr. POTTS. You know, I am relatively new. I came on board January 6. I had a lot of the same questions that you had, as far as whether or not we had adequate staffing and whether we had planned properly.

And as a result of that, we began to look at our system, and talk to our field division managers and our facilities.

And what we did, after early May when the Administrator announced or indicated that there ultimately would be a requirement for more controllers, we focused on four areas.

We took a look at the actual traffic growth versus the forecasts at the time that the fiscal year 1988 budget was put together, which was a year ago, last summer.

We found that the traffic growth was considerably more than forecast; we took a detailed look at that, and I will go into detail if you like.

We took a look at the number of controllers that were actually at the academy, in other words, the student pipeline. My concern was that we kept that pipeline going, that we did not have a gap in it.

Because as you have already indicated it takes 2 years, a little over 2 years, to actually get a controller.

We took a look at the increased workload in certain areas where we had implemented the airport radar service area concept, which added more workload than had been anticipated at the time those concepts were developed.

We took a look at the need for traffic management units consistent with our overall traffic management flow control program, of which, the central flow facility is just one of many things; it is not the answer to all of our problems, and I certainly agree with that.

We, then, took a look at our field facilities, with the thought in mind of determining how many people that we needed for those positions.

We also took a look at the supervisor and staff specialist positions in the facilities since the first line supervisor is very vital to the operation of our system.

The supervisor is a very experienced controller, and that is usually the first place traffic problems are noted. In other words, they are in real time. They have got their hands on. They are moving the traffic. They are watching what the controllers are doing on a real-time basis.

They are in the best position, really, to decide when or where a problem of congestion might occur.

With regard to the traffic growth, our controller work force goal of 15,225 was actually set, as I said, last summer based on the traffic forecasts that were in effect at that time.

We assumed a growth of about 3.2 percent in 1987, and about 2.8 in 1988. Our actual experience was that the traffic has been about 4.8.

TRAFFIC FORECAST

Senator LAUTENBERG. Now, when was that forecast made?

Mr. POTTS. I will have to ask Mr. McDaniel to tell you when that forecast was actually made.

Mr. MCDANIEL. The forecast years for the 1988 budget submission was made in February 1986, based on data that was collected toward the end of 1985.

So there was a time lag in budget preparation from the forecast date.

Senator LAUTENBERG. So this was simply an extension of the historical data to that point, and saying that that was the growth number that you would use to forecast your requirements?

Mr. MCDANIEL. For 1988, yes.

Senator LAUTENBERG. Information up to 1985 was used in the forecast developed February 1986?

Mr. MCDANIEL. Right.

Senator LAUTENBERG. OK. And the historical data that you worked from showed what kind of an increase in air traffic at that point, do you remember?

Mr. MCDANIEL. What kind of decrease or increase?

INCREASE IN TRAFFIC

Senator LAUTENBERG. Increase. How much had traffic increased from 1984 to 1985?

Mr. MCDANIEL. There are several measures of traffic: instrument operations, and operations at our en route traffic control centers are the two primary measures that have an influence on staffing levels of air traffic controllers, because those are the heavier workloads.

Senator LAUTENBERG. What were they?

Mr. MCDANIEL. For instrument operations, the increase from 1984 to 1985 was about 3.5 percent.

Senator LAUTENBERG. 3.5 percent?

Mr. MCDANIEL. Right.

Senator LAUTENBERG. And if we use the same yardstick, the same index, what was the basis that you used for forecasting, what number did you arrive at for forecasting the traffic for 1988?

Mr. MCDANIEL. For 1988, we took into account what the increase had been in 1985, as we knew it. We looked at what the changes in the economic conditions were projected to be, and by that I mean, the projections for the gross national product, consumer price index, what did we expect, what did we know had happened, with regard to the pricing strategy of carriers. That is, how much income were they receiving from each passenger during that period.

What did we anticipate their pricing strategy would be for the next year? We looked at what the influence and historic trends had been between the available monetary conditions and the purchase of general aviation aircraft.

We looked at all of those factors in light of the historic trends, and then made our estimates for what we would expect in 1988.

Senator LAUTENBERG. And what did you come up with for the year?

Mr. McDANIEL. For the year, in 1988, we projected an increase from 40.4 million in 1986 to 42.3 million——

Senator LAUTENBERG. What is the percentage? Is that 5 percent?

Mr. McDANIEL. Roughly, 4.2 percent.

Senator LAUTENBERG. 4.2 percent.

Mr. McDANIEL. 3.2 percent, excuse me.

Senator LAUTENBERG. Two?

Mr. McDANIEL. 3.2 percent.

Senator LAUTENBERG. 3.2. It was 40 million and it was increased to 40.4, did you say, to start with?

Mr. McDANIEL. 42.3.

Senator LAUTENBERG. 40.4 to start with; 42.3——

Mr. McDANIEL. Right. That is an increase of about 5 percent.

Senator LAUTENBERG. It is awful close to 5 percent.

Mr. McDANIEL. Yes.

Senator LAUTENBERG. OK, with that kind of forecast, did you revisit that forecast again after February 1986?

Mr. McDANIEL. Yes, we did. We revisited it in February 1987. And in February 1987, we lowered the estimate for instrument operations, and tower operations.

We lowered them in instrument operations from 42.3 to 41.7. We did that for two primary reasons.

One is general aviation, which is a significant portion of the instrument traffic, for years we had believed that it would rebound significantly to approach its earlier levels prior to the oil embargo and the late 1970 oil price runup.

In fact, we had overestimated historically general aviation traffic. And so we lowered our estimates in 1988 of what we expected general aviation to be.

With regard to commercial traffic, point two, we lowered our estimates as well, because we had experienced in 1985 and 1986, 2 years of historic growth in the number of revenue passenger miles; double digit increases in both 1985 and 1986.

The real yield available to the carriers during that period dropped 18 percent. We expected some correction in that yield, and some leveling off of the commercial traffic in 1987, which did not happen.

But that was our estimate when we corrected it earlier this year.

Senator LAUTENBERG. OK, but in June 1987, suddenly there was a revision upward of fairly significant proportions, enough to say, I need 950 more people to operate this system.

What happened? In February you revised the figure down significantly, a couple of percentage points, down by 600,000 movements.

So now we have suddenly been faced with an expanded prospect for 1988. Is that where we are?

Mr. McDaniel. That is correct.

Senator Lautenberg. Does that, Mr. McDaniel or Mr. Potts, whoever is in charge here, does that suggest that there is either a problem with the forecasting, or a problem with the sequence of doing forecasting?

Obviously, there is something amiss, or else the Secretary is willy-nilly just wanting to expand the work force.

Mr. McDaniel. I do not believe that the Secretary is just willy-nilly wanting to expand the work force. I believe we underestimated the growth in activity which continued into the early part of 1987.

We monitor basically the quarterly reports submitted by the carriers. We observed toward the end of March, which is when the data for the first quarter of 1987 becomes available, and found that our forecasts were likely to be low; that the dropoff in traffic we had expected because of changes in economics in fact did not materialize.

The carriers were continuing to offer lower fares, and the traffic was continuing to grow.

At the end of 6 months, then, when we revisited the first half of the year, we revised our forecast upward significantly, because we thought it prudent, looking to 1988, to readjust those forecasts to take account of what was really happening.

Senator Lautenberg. The thing I see, and I know you want to be right, is that we are spending an awful lot of money to prepare the system, and here we are using data which are either unreliable, or as I said earlier, the forecasting system is questionable.

You had one forecast in February 1986, and another adjusted one in February 1987, which said no, we do not need that many. Now along comes still another forecast which elevates this to what level?

Mr. McDaniel. 3.2 percent would have been the increase that we forecast for 1987, based on our latest February 1987 forecast.

Senator Lautenberg. Right. And when did you do the one that occasioned the request for an addendum to the budget?

Mr. McDaniel. We completed that in the middle of May. We issued the report just at the end of June. But the information that we based that report on was available around the middle of May.

Senator Lautenberg. OK. Again, I am not trying to attack anyone's credibility. I think you are very candid when you tell me what the time sequence has been and when these forecasts have been revisited and redone.

Mr. McDaniel. We are quite proud, Senator, actually, of the accuracy historically of the forecasts.

Senator Lautenberg. Which month, Mr. McDaniel?

Mr. McDaniel. Within 1 to 2 percent. Well, the consequences of a 2-percent underestimate, or a 3-percent underestimate, is basically what you're seeing now.

In fact, for 1987 FAA's estimate of the increased commercial traffic was probably at the high end of all those who looked at what was going to happen in 1987.

We feared that we had overestimated rather than underestimated. We expected an increase in the carrier operations of half a million at air route facilities. In fact, it looks as though it may be a million.

Most people thought a half a million was too high when we made the estimate. We moved along, and we have corrected the error that we made.

Senator LAUTENBERG. Two percent in a company's revenue or income forecast is not much of a miss.

I think probably in brain surgery it has a different consequence. Again, I do not want to minimize the effort that has gone into this thing.

In my view, I must tell you that to err, when we are talking about safety, to err on the optimistic side I think is a better idea, even though it costs some precious dollars that we do not have enough of, especially when the process is so elongated before the decisions that are made result in a better system.

It takes a long time to get these people. We know there is a high washout rate. And right now, would you say that with the forecast that you came up with in February 1987, that we had more controllers than were necessary?

Mr. McDANIEL. February 1987 forecast? No; I would not say that. Because we were looking at the 1988 time period, and there was not a significant readjustment in 1988.

But I think your very point about the prudence of looking ahead, with regard to anticipating, is what would lead me to say that.

One thing that I believe we have learned, as a result of the exercise that we have just gone through, is the need for some additional lead time in the planning process, and the review of that process.

So we will be revisiting those forecasts more frequently, and I think planning on the contingency that perhaps we have underestimated.

STAFFING STANDARDS

Senator LAUTENBERG. Do you take into the calculation washout rates and potential retirements, factors that might reduce the force, either the force growth, or reduce the force size?

Mr. McDANIEL. Not in the forecast that we make. We do the traffic forecast, then turn those results over to Mr. Potts and his people, who then analyze the controller requirements which result from this.

Mr. POTTS. And the answer to your question is, yes, we do, Senator. We do take that into account.

Senator LAUTENBERG. Well, let us just check your system for determining how many people you need, then.

Traffic forecasts, we have heard from Mr. McDaniel. Then you have something I would characterize—so would FAA—as a staffing standard, right?

Now is that essentially a job specification including experience, training, knowledge? Are those the elements of what you would consider a staffing standard? Or is it strictly by the numbers?

Mr. POTTS. Well, we do have staffing standards for both the terminal and the en route option, as you indicated. And those standards consider the complexity of each individual position of operation within those facilities.

They consider the airspace, the size and shape of the airspace in a particular sector, and the complexity of that sector having to do with how many airways may be in it, how many instrument approach procedures may be in it, and a whole host of things that have to do with how airplanes fly and how controllers control airplanes.

And it is a very detailed standard.

Senator LAUTENBERG. How about a staffing standard for traffic management coordinators [TMC's]? Is there one?

Mr. POTTS. No; there is not a staffing standard. We have guidelines.

Senator LAUTENBERG. Should we have one, do you think?

Mr. POTTS. Well, yes and no. We should formalize it for standardization. But we are well aware of what it takes to run a traffic management facility. Our people know that.

And we do have guidelines. We have orders that cover the overhead, or other than air traffic control positions.

Senator LAUTENBERG. Right. These are numerical relationships, is what I think I hear you saying. That for *x* number of movements, et cetera, we are going to have *y* number of people.

But you say you have no staffing standard? I would think it is a fairly important job, TMC, is it not?

Mr. POTTS. Certainly.

Senator LAUTENBERG. I think in order to be more comfortable with the selection of the number of people to fill these jobs, a standard ought to be developed and pointed to, and modified if necessary, to say, OK, this is at least the kind of experience level, these are the number of people we have to have relative to the structure of the force, not simply relative to the structure of the number of flights.

Mr. POTTS. Well, I agree that we could have a standard. But I do not want to leave you with the impression that we do not know how to staff those positions.

Each of those positions has a very detailed position description for the individual that is assigned to it, and they know precisely what they are supposed to do. Based on that, the supervisor knows how many he needs for a given facility, depending on the complexity and traffic volume in those facilities.

Some report more traffic management than do others, or more people than do others. So it is not something that we are just doing willy-nilly. We do have a very educated program based on our experience.

Senator LAUTENBERG. You almost said educated guess.

Mr. POTTS. I almost did.

Senator LAUTENBERG. And I would like to get away from that as much as possible, as I am sure you do.

Let me ask you about staffing requirements. Do you have any concerns about the quality of the staffing standards you have for controllers?

Mr. POTTS. The en route standard that we have today is very generous, and it is a very good standard.

The terminal standard we are working on. It leaves a little bit to be desired in some of the facilities that have unusual circumstances, where traffic has grown considerably in the past—in recent months because of hubbing of airline schedules and that kind of thing.

So we are working on that now. We are in the process of revising it.

Senator LAUTENBERG. Can you explain what Mr. Burnley meant when on June 15 just past he testified before the Senate Commerce Committee, and he said, and I quote him here: FAA is undertaking a comprehensive reassessment of its air traffic staffing standard.

Mr. POTTS. Well, I will not try——

Senator LAUTENBERG. Well, those were his words. Does that suggest a course of action for you? If so, why?

Mr. POTTS. As I just said, we are going to review the terminal standard. But we on the operational side of air traffic, we continually look at those standards to make sure that we do have enough people.

And we relay our concerns and recommendations to the people that actually develop the standard. And that is done by our management system people.

But we are reviewing them.

Senator LAUTENBERG. I am talking about a comprehensive reassessment meaning, I guess, the total thing.

Mr. POTTS. Yes; we are doing a comprehensive review of the terminal standard.

Senator LAUTENBERG. He says of its air traffic staffing standards. When you say that, you are talking about more than traffic coordination. You are talking about controllers and everybody, are you not?

Mr. POTTS. Yes, we are.

Senator LAUTENBERG. So therefore, are you saying that it is up to the level that you would like it to be? You said you are satisfied with the staffing standards you have for controllers. Regarding this reassessment, is it being done simply because it is a good idea to reassess things?

Or are you doing it because there is no staffing standard for traffic management people, TMC's, and the whole system? To me, it sounds like what he is talking about is a total review, which is fine.

Mr. POTTS. Well, again, I do not know what he meant. But we are doing a review of the terminal standards, because we do not believe the present standard is adequate.

The en route standard, we believe, is adequate, because it does produce enough people for the en route facilities. And we are not happy with the terminal, and we are doing a comprehensive review of that one.

If you want the details on the review, we have someone here that can tell you exactly what we are doing, or we can furnish it for the record, whichever you desire.

Senator LAUTENBERG. Is there a total review taking place?

Mr. POTTS. Of the terminal standard, yes.

Senator LAUTENBERG. Are we talking about the terminal standards only? Or, are we talking about the whole controller quota and its ancillary positions?

Mr. POTTS. I want to be responsive. That is why we are conferring here.

Senator LAUTENBERG. Please do.

Mr. POTTS. We have the terminal controller who controls airplanes in a terminal area at an airport. That is a different animal than a controller that controls airplanes in a center.

The standard for the center staffing is adequate, and I reviewed that personally when I came on board. It is producing enough people for the centers.

The terminal, or the tower, people, I have a problem with. The management systems people are doing an indepth review, a comprehensive review, whatever you want to call it, a complete overhaul of the terminal standard, in which they are including work groups madeup of field controllers, field people, and others.

And we can give you more information on that if you like as to exactly what we are doing.

STAFFING STANDARD REASSESSMENT

Senator LAUTENBERG. OK, so then when we talk about the Burnley statement, the comprehensive reassessment of its air traffic staffing standards, you are narrowing that definition, I take it.

Mr. POTTS. That is what I am doing. I do not want to mislead you that I am doing an overall in depth review, because I am not.

Senator LAUTENBERG. Mr. Potts, I want to spend just a moment on the improvements, the reassessment that is being done. You have done an exhaustive reassessment of the numbers, of the data, that helped the Secretary put in the budget request for 1988.

We had your comment about the February 1987 review, and then May 1987 review.

Would you term that an exhaustive reassessment? Or was it simply an updating of the process that was used to make the earlier forecast?

Was it simply a reforecasting?

Mr. MCDANIEL. I think there were two activities that were going on at the time, Senator. One is the activity which Mr. Potts might speak to with regard to the assessment of air traffic controller requirements in light of the prospective growth.

With regard to the forecast itself, I would characterize the assessment that was made as being in greater depth than a normal assessment that we would undertake, because we routinely visit what is happening with regard to the traffic.

This was a more indepth look at what is happening with the traffic than we would routinely make.

Senator LAUTENBERG. Should you not have taken a greater look in February? I am not sure, was there some public pressure? Was there this contestation that seemed to exist between Congress, GAO, NTSB, and FAA?

Do you think that that caused someone there to scratch their head and say, listen, let us really get into this thing now, because what we have seen is forecasts that vary substantially, and we had better have the latest and the best in order to justify this change that I think is necessary?

Mr. MCDANIEL. I do not believe so, Senator. I think that the forecast that we produced in February was our best estimate of what we expected to happen as of that time.

Senator LAUTENBERG. What would happen if we reforecast in August? Would you try to adjust?

You see, the thing, Mr. Potts, that I want to get at is, when do we decide that we have enough, or we need more, or we have too many?

Because if a forecast separated by a 3-month interval, changes the requirement to that extent, then I would be concerned that maybe in August we would see another forecast that says we are up a couple more points; let us ask for another 200 or 300 on top of that.

It is not very comforting to me. I have a budgetary responsibility. I have a responsibility to the traveling public.

Mr. McDaniel, I know how hard you must work on these things, but I do not have a feeling that we have approached this in a manner that says, this is a moving target, and therefore, we are going to hire based on this month's forecast or next month's forecast, or the forecast of the month after.

Mr. POTTS. Well, I share your concern about forecasts, and Mr. McDaniel already explained that it was not the most accurate thing. We looked in air traffic at actual performance.

We looked at the increases that actually were taking place out there on a real-time basis.

Our actual increase in the first 6 months was a 7-percent growth, which was well above the forecast. So we began to look in detail, month by month. February was up 6.2, and March was up 9.2. At that time we said we have to take another look at this.

In that indepth look that we took, we looked at the six areas, the traffic growth, the national pipeline, the ARSA concept, the supervisor and staff specialist position, and our traffic management coordinators, and also, our radar training facility where we recognized that we needed more people.

So we focused in those areas. We asked for 400 people for the traffic increase, and that was based on our estimate that we should anticipate at least a 6-percent growth in 1989, and about a 5-percent in 1988.

We put 400 people in that request for the increase in the pipeline, in other words, our students, our new hires, that are flowing into the Oklahoma City academy.

We added 135 to make sure there were no gaps in there. I think it was because of some of the concerns that you raised that we looked at that pipeline in this context.

So I think that was a plus. We added 135 to that pipeline.

In the ARSA concept we added 45. In the supervisory and specialist area we added 200, and in the terminal traffic management unit, 92.

If you add all that up, it comes to 580 controllers, and 375 others, for the 955.

That is how we arrived at it. I can go into greater detail on how we did that. We did not just throw at a dartboard. We actually did some work.

Senator LAUTENBERG. No; I am sure it was not intended casually. It is an exercise that is required.

But I am not feeling very secure at this moment as to whether or not, as I face a 15-month period, the remainder of 1987 and the full fiscal year of 1988, that we really know what our requirements are going to be.

There is something interesting here, Mr. Potts. An official within your organization told the subcommittee staff he has been engaged for the past 2 years in the development of a much needed better system for determining your air traffic staffing needs.

And again, if it is necessary, let us get it out on the table. But it does suggest that what we did in the past may not have been up to the level of either sophistication or reliability that we need to make these important decisions.

Mr. POTTS. Well, I do not know exactly what you were told, but we do have people who have been engaged in developing a lot better technique for determining our gains and losses.

It did take some time to develop a data base, and we have that. And we know each month how many people we expect——

Senator LAUTENBERG. When was that? In May of this year, is that when?

Mr. POTTS. It was completed in May.

Senator LAUTENBERG. Completed in May? So that you feel more comfortable now, looking back, with the forecast done in May than you did with the one done in February, not simply because it changed the numbers, but because it changed the process?

Mr. POTTS. That is correct, yes.

Senator LAUTENBERG. Are there improvements that need to be made, in your judgment, to the forecasting system yet? Do you have to fine-tune it some more?

Mr. MCDANIEL. I think, yes, we are continuing to look at the forecast. It is particularly difficult for us to forecast turning points in activity.

We are continuing to look at what the industry does and find better ways to capture how that translates into numbers of operations.

So I would say that we need to continue to improve both our forecasting techniques and our review of those techniques.

Senator LAUTENBERG. So are there factors other than forecasting, Mr. Potts, that are used in determining staffing?

Mr. POTTS. Factors other than the staffing——

Senator LAUTENBERG. Just the forecasting.

Mr. POTTS. Well, generally, that is the——

Senator LAUTENBERG. Is it the only thing that drives the system?

Mr. POTTS. That is the way we arrive at our long-term planning, and then we make adjustments as we go along, just as we did now.

And as the Secretary explained, it is a dynamic system going on all the time. Anytime that we see that the forecast, in our opinion, is not correct, we do make an adjustment, just as we are doing now.

Senator LAUTENBERG. The forecasting is strictly data, strictly numbers. It does not, does it, take into account technological change; does not take into account the fact that we will have parts of the system up and running hopefully within the next year; it does not take into account the fact that in some way controllers for an interim period may even be busier as new equipment is introduced paralleling the present system?

Am I off base in that assumption?

Mr. POTTS. No; you are correct. We have an entirely different area to cover. Each facility has a planning officer, some of the smaller facilities do not, but most do, who works with the planning people in our regional offices.

They determine the number of sectors that they need, based on the workload and traffic. Sometimes they determine that if a sector is routinely busier than they believe it should be, they will make a recommendation to split that sector and develop new ones.

And we are doing that. We are planning 10 new sectors for 1987 and 10 more for 1989. That is the other way around, I am sorry, it is 10 for 1988 and 10 for 1989; a total of 20.

And that adds roughly 180 controllers.

Senator LAUTENBERG. Are you incorporating into any of the local facilities planning officers? Do you have people assigned on a regional or local basis whose specific assignment is to do the planning?

Mr. POTTS. Yes; we do. That is part of the 200 supervisors and staff specialists that we included in the amendment.

Senator LAUTENBERG. Before we get to the safety initiatives for the summer, I want to explore a couple of areas regarding the evaluation of the margin of safety in the air traffic control system.

And Mr. Hendricks, I think you are the director of the Office of Aviation Safety, correct?

Mr. HENDRICKS. Yes, sir.

Senator LAUTENBERG. Does the Office of Aviation Safety make routine evaluations of the ATC system safety?

Mr. HENDRICKS. We do not make routine evaluations of the system per se. We basically have an oversight responsibility, if you will, for the safety issues in all of the areas.

So should a safety issue come before our office that would pertain to the air traffic system, we would look into it.

Senator LAUTENBERG. How does that come to your attention? Is it a critical incident?

Mr. HENDRICKS. We have accident/incident investigation responsibilities, as you know Senator. We would be informed that way, or through occurrences.

We also have the operations errors and the NMAC near-miss data bases that we cull through and perform special studies on. So we would be informed that way.

Senator LAUTENBERG. Are field visits made by your staff? Do they go into the towers, into the centers, the en route centers, and routinely do this?

Or is yours really more of a backup response function?

Mr. HENDRICKS. Our visits by our staff would generally be in connection with investigation of an occurrence, an accident, not as an IG visit.

Senator LAUTENBERG. Do you interview controllers and other personnel when you're doing an investigation?

Mr. HENDRICKS. Yes, we do.

Senator LAUTENBERG. What role does the safety office play in regard to safety board recommendations?

Mr. HENDRICKS. Basically, we have the coordination responsibility, when the recommendation comes in, to see that it is properly tracked and sent to the appropriate office of interest for their response.

We also have an oversight responsibility to ensure that the recommendation response addresses the areas, the safety areas, that the recommendations pertain to.

Senator LAUTENBERG. Well, is the first task a message forwarding task? You get a request from the NTSB and you said you send it on to the proper parties.

Is that, in that connection, is it a message center? You say you are not responsible for implementation; do I understand you correctly?

Mr. HENDRICKS. Well, I would not say that we are not responsible for implementation. We are responsible to see that the recommendation is properly addressed and returned to the NTSB with our response within the specific period of time.

Senator LAUTENBERG. So you get a report back from someone who might have an involvement that says, OK, we have taken care of this, and list the reasons. I am not diminishing the process.

And you then go back to the NTSB and say, situation A has been covered?

Mr. HENDRICKS. No; we have the responsibility to review the proposed response, let us say in the case of an air traffic recommendation, that would come back from the appropriate office in the air traffic system with a proposed response. It would be our staff's responsibility to review that recommendation to ensure that it is on target with respect to the safety issue that is being addressed by the NTSB, and that our answer is logical and consistent with other safety issues, and is responsive to any safety questions that may be raised.

So we have oversight.

Senator LAUTENBERG. OK. But as you said, you are not an IG, and you are not an independent agent with the agency.

Mr. HENDRICKS. We have no line responsibility with regard to that.

Senator LAUTENBERG. Let me ask you this. You have done this job, you have been in it for some time?

Mr. HENDRICKS. I have been in this job for 6 months.

Senator LAUTENBERG. And before that, were you part of the system?

Mr. HENDRICKS. I was with the NTSB as chief of accident investigation for 23½ years.

Senator LAUTENBERG. So you are fully familiar with the safety issues, certainly.

Would you say that you ought to have a more independent mandate or agenda?

Do you think that you ought to be doing routine reviews to just try and stay ahead of the problem?

What would you think about those two propositions?

Mr. HENDRICKS. Well, I would like to see a more active role in overall safety by the agency. We have some plans along those lines.

I think where we are situated now, where we report to the administrator, is a logical place for the Office of Aviation Safety. We are responsible to advise the administrator on all matters——

Senator LAUTENBERG. Well, is it to advise or report, Mr. Hendricks?

Mr. HENDRICKS. To report and to advise.

Senator LAUTENBERG. Because as I understood your earlier comments, it was really an investigatory response to an incident. So you are reporting back at the same time and saying, well, OK, but my advice is we do not crowd this space any more, or that we need more people in the tower and we have to change something there, include a piece of radar or something of that nature.

Mr. HENDRICKS. As opposed to an IG responsibility and going out on investigation, I would say that I would prefer to see the Office of Aviation Safety not involved in that type of a situation.

I think that safety issues are developed through accident investigation and incident investigation, our close association with the NTSB in this regard, the recommendations that come into our office, the routine safety studies that we do with respect to the operational errors and the near-midair collisions that we are responsible for. I think to this point we have developed the safety issues that are important.

We are trying to expand into other areas, and we have a program that should be ongoing——

Senator LAUTENBERG. You would support an initiative that gives you a little more independence, and maybe an earlier entry point into the safety evaluation process?

Mr. HENDRICKS. Yes, sir.

Senator LAUTENBERG. Do you agree, Mr. Potts, by the way?

Mr. POTTS. Well, I certainly do not disagree. But I would like to expand just a little bit on your concern there.

We do have a very aggressive and extensive quality assurance program within air traffic. We have a group in headquarters and in each one of the regions that does a facility evaluation of each major facility each year.

One year the headquarters staff goes to the facility and does an indepth evaluation, and then on the other year, the regional office does the follow-on evaluation.

Our evaluation specialists are involved daily. They ride the jump seats in airliners, and they monitor the system. They are involved in a detailed processing of every operational error, every operational deviation, and they are required to make changes in the system as a result of their investigations.

And the operational error business in the region, there is a very detailed process for that, which involves an indepth review of everything that went on, including replay of the tape with the controllers who have tape talks and those kind of things.

So we have a very aggressive, safety-type quality assurance program.

Senator LAUTENBERG. Does anybody do personnel evaluations? Is there someone visiting with these people from personnel or manpower what have you, and saying, hey, these people are being pushed to the limit?

Is there any test that you have that determines the individual's ability to perform fully?

Mr. POTTS. The answer is yes. Each controller is given a semi-annual over-the-shoulder evaluation by his supervisor——

Senator LAUTENBERG. That's just a supervisor, is he not on the scope himself?

Mr. POTTS. No; it is mandatory. They find time to do it.

Senator LAUTENBERG. I want to ask you one thing here. It is my understanding that your office alerted Admiral Engen on May 20 that the staffing numbers in the original fiscal year 1988 budget request were not valid, and that he immediately let the Secretary know that.

Am I right on the date, May 20?

Mr. POTTS. I think it was on or about May 20, I do not know the exact date. But I did notify him about that timeframe that I believed the staffing standard—or the staffing requirements that we asked for in the 1988 budget were not adequate.

Senator LAUTENBERG. Was not adequate? And this is not for your response, but for public observation.

I would point out that the administrator's statement in his op ed piece, dated May 28, Washington Post, was that you should reach optimum staffing levels by the end of this fiscal year.

That was May 28. He had already heard about it. I think that it's fair to say, and kind to say, that it was clearly misleading.

Do you have any other interpretation of either the sequence or the statement, other than the one I presented here?

Mr. POTTS. The only assumption I can draw from that is that he was probably talking about this year, 1987. I do not know precisely what he was talking about.

Senator LAUTENBERG. Well, that certainly was not the intent. Because we had been in many discussions about fiscal year 1988.

But, again, it is not up to you to judge the veracity or the intent of the statement. But you did what you did when you did it.

Just a couple more things. The former administrator referred to the ASD display as a developmental system. Is that an accurate description of ASD, developmental?

Mr. POTTS. It is a developmental system. Yes; that is an accurate description, because we are developing it all the time.

Senator LAUTENBERG. Is it true that central flow control does not really control traffic in flight at this time?

Mr. POTTS. Central flow control has never controlled actual airplanes, and they never will. That is done at the sector and facilities.

Senator LAUTENBERG. Do you have the number of TMC's at the en route centers that you need for present day traffic?

Is it true that monitoring traffic flows, making adjustments, reducing air speeds, increasing miles in trail, is a normal duty of TMC's and controller supervisors? Is that a fair representation?

Mr. POTTS. Well, I am not sure I quite understand.

Senator LAUTENBERG. Monitoring traffic flows, making the adjustment, reducing air speeds, developing miles in trail, distances between—these are the normal duties, are they not, of traffic management?

Mr. POTTS. Sure, firstline supervisor and traffic managers, as well as the radar controller and the manual controller. That is their job. It is a joint effort.

Senator LAUTENBERG. Was your colleague able to come up with that figure yet?

Mr. POTTS. 400.

Senator LAUTENBERG. 400? Is that adequate for today's needs?

Mr. POTTS. Yes; because if we are short a position, we cover it with overtime. So it is adequate for now.

Senator LAUTENBERG. OK. So those functions that I described are the normal functions. And if that is the case, what is unique about the new procedures being put in place this summer for the sectors not being monitored by central flow and headquarters?

Mr. POTTS. Well, what is really different about the program, there is, prior to the traffic sector, or sector traffic management program, we only looked at the terminal area.

We did not look at the en route sectors. This is new. We are now looking at those sectors.

As the Secretary said, we ask our regions to identify those sectors that could approach their limitations this summer.

The thing I would add to what she has already told you is that it was very successful, contrary to what you might have heard.

It was so successful, in fact, that it drove eight of the carriers to come to us and change some 90 routes, in order to eliminate some of the delays they were getting around those sectors, primarily in the Chicago area. In other words, the overflights were going from a point to another point, not landing at Chicago.

They did voluntarily agree to make those adjustments. That has helped us considerably.

Senator LAUTENBERG. What about the centers that are not included in the review? The number, we again go out to 125, you said 28 was the number used before. Does that mean that there is a substantial number of these not under the control of the air flow system?

Mr. POTTS. No; we look at all the sectors all the time. This is a special interest this program put on sectors that were identified as those that had the potential to become problems.

Senator LAUTENBERG. Are the others worthy of the same attention?

Mr. POTTS. Sure, if in fact their indicators are that they will become overloaded, yes.

Senator LAUTENBERG. What would you do if everything was loaded? Could you examine them all at the same time?

That would really strain the system. It would strain the individual, certainly. You are not up to that level yet, is it fair to say?

Mr. POTTS. I think that is fair. I think we cannot do it.

SUBMITTED QUESTIONS

Senator LAUTENBERG. Thank you very much. We have some more questions we will submit to you in writing.

I appreciate your being here, all of you. Again, if the questions are harsh—I do not think they are obviously—they are intended to get to a system that we all feel comfortable with.

I know no one takes that responsibility more serious than you who are at FAA, all professionals and I respect your commitment.

Mr. POTTS. Thank you very much.

[The following questions were not asked at the hearing but were submitted for response for the record:]

QUESTIONS SUBMITTED BY SENATOR LAUTENBERG

FAA's SYSTEM FOR DETERMINING CONTROLLER STAFFING NEEDS

SENATOR LAUTENBERG. When will you have staffing standards for supervisor positions at en route centers and for traffic management coordinators?

ANSWER. The staffing guidelines for supervisors are addressed by FAA Order 1100.123C for the centers and 1100.126E for terminals. These Orders specify the maximum supervisory staffing levels for all facilities as a function of facility size and type. Our first priority is to revisit the terminal controller staffing standards. Once they have been revised, we will address the issue of staffing standards for supervisors and Traffic Management Coordinator (TMC) positions. In the interim, the Orders are currently being revised to address the TMC positions and we anticipate the revised Orders to be completed and in effect by January.

SENATOR LAUTENBERG. Regarding your reassessment of the staffing standard for controllers at terminal facilities, provide the following information for the record.

(1) Reason for the reassessment
(2) Specific aspects under review
(3) Date started
(4) Key milestone dates
(5) Expected completion date

ANSWER. (1) Reason for the assessment. FAA continually revises its staffing standards. Staffing standards for the air traffic control terminals are being revised because numerous changes have occurred since the data upon which the current standards are based was collected.

(2) The specific aspects under review are: (a) procedures for flow control, which require more involvement by ground and local control; (b) phraseology changes; (c) five-minute controller overlap procedures; (d) implementation of tower-en route procedures; (e) changes for terminal control area (TCA) requirements; and (f) establishment of airport radar service areas (ARSAS) which provide services for both VFR and IFR aircraft.

(3) Date started. Preliminary work began in June 1987 including development of requirements, discussions with possible contractors, scheduling field facility visits, investigation of available data, and discussion of possible methodologies.

(4) Key milestone dates. Staffing standards for the controller work force at TRACONs, both stand alone and located at towers, will be undertaken. Work on issuance of a task order contract and statement of work began in July. A contract will be issued the second quarter of FY 1988, pending availability of funds. A methodology will be developed, workload data collected, new staffing standard algorithms developed, tested and revised as necessary, and a draft standard developed approximately one year from the date of contract award, which would be in the spring of 1989. Final acceptance of staffing standards by FAA may take another 12 months, depending on comments received from FAA's regions, offices and services.

(5) Expected completion date. Completion is expected in the early spring of 1990, in time for use in the formulation of the budget for FY 1991 and 1992.

SENATOR LAUTENBERG. Has there been a recent, substantial change to the way FAA has been determining controller staffing needs?

ANSWER. The major change that has been made is the introduction of an expanded pipeline for training. The pipeline is now computed based on expected controller requirements in the year the trainee completes training. The old method based the pipeline on the requirement for the year training started. In addition, we would like to develop workload based staffing standards for supervisors, and TMCS. We will also have to modify our standards to take into account the creation of air traffic hubs and the resultant redistribution of workload.

SENATOR LAUTENBERG. What improvements have you made and how were they factored into this budget amendment?

ANSWER. We have made a number of changes at both the micro and macro level. We are now looking at workload projections for the individual facilities for the time period two years beyond the budget year. This allows for the time necessary to produce operational controllers.

At the macro level, we have incorporated a training pipeline that provides additional positions over and above the staffing standards. The additional positions allow for training losses and trainees in the pipeline either for staffing growth or to replace expected losses.

At the same time that Headquarters Air Traffic is developing this top down requirement, the regions are requested to submit their controller staffing requirements based on their assessment of operational needs. This bottom up approach is then matched against the top down approach to allow for both inter and intra regional and facility reallocations.

This revised process required the development of data bases and computer programs that only recently became operational. They were not available for the original FY 1988 budget formulation, but were used to develop the proposed budget amendment.

SENATOR LAUTENBERG. What improvements remain to be made?

ANSWER. The terminal staffing standards are under review and we expect to have some changes as a result of that review, which include hubbing and TMC's.

SENATOR LAUTENBERG. Does this amendment represent the first product of the effort to improve your system?

ANSWER. We have been constantly and consistently improving the system. This effort is just a continuation of our improvements to the system.

SENATOR LAUTENBERG. What constitutes the "exhaustive reassessment" over the past 3 months that the Secretary referred to in her June 3rd letter to the committee?

ANSWER. The "reassessment" focused on five areas:

(1) Routinely, between our annual forecasts issued every February, we monitor traffic activity to measure what is

happening relative to our forecast, but do not issue forecast updates. During the spring of 1987, however, traffic growth was much stronger than we, or anyone else, expected. That caused us to look at a variety of factors. For example, we reran our air carrier fleet model with no retirement of Stage-2 aircraft until after 1991. The results provide us the upper limit for air carrier growth at FAA facilities. We also looked at the factors which might explain an unexpected growth in general aviation traffic. We concluded that the factors underpinning early 1987 growth were likely to continue into FY 1988. This, in turn, has led us to adjust upward the forecasts used to determine the staffing needs. The expected growth rate will create the need for additional center sectors and additional terminal positions. All of this was captured in a May 1987 forecast update, marking the first time that a mid-year forecast adjustment had been made.

(2) The number of controllers actually at the Academy each month (student pipeline) has been increased by over 135.

(3) Increased workload caused by the ARSAs has generated a need for 45 additional positions. In the projection, we reflect an accelerated schedule for implementing the balance of the ARSA program.

(4) Increased staffing needed for traffic management units in centers and the establishment of new units at selected terminals has generated a need for 175 positions.

(5) Need for increased numbers of supervisors and staff specialists and support positions.

SENATOR LAUTENBERG. If substantial improvements were needed to your system, how would you characterize the quality of the information we have received in the past in regards to your staffing needs?

ANSWER. Information provided in the past has generally been accurate. However, we have expanded the quantity of data collected and have greatly enhanced the analytical techniques to extract information from the data. Since we are constantly evaluating and examining our systems and methods, "reassessments" will take place as a way of life.

SENATOR LAUTENBERG. Mr. Engen stated on 5/28/87, that staffing shortages are restricted primarily to a half dozen en route centers and some selected terminals. Was that statement accurate as of May 28? (If yes, provide the list of such facilities for the record).

ANSWER. The statement was correct. Mr. Engen's reference was to those facilities that were below the 60 percent full performance level (FPL). The facilities in that category as of May 23 were: Anchorage, Chicago, Indianapolis, Minneapolis, Cleveland, Jacksonville, San Juan, Los Angeles, and Oakland Centers and Akron Tower. Some of these facilities are expected to reach the goal by year end.

SENATOR LAUTENBERG. If not, what is the scope of the staffing shortages problem?

ANSWER. The statement was correct as it related to FPL's. The authorized number of controller positions are essentially filled at those facilities. The FY 1987 staffing levels are sufficient for today's level of traffic. The FY 1988 amendment provides the additional positions to meet the revised forecasted rate of growth.

SENATOR LAUTENBERG. Is the Congressional requirement to attain certain minimum levels of FPL controllers adversely affecting the safe and efficient operation of the air traffic control system?

ANSWER. Although safety has not been compromised, the requirement has reduced the flexibility of FAA management to reassign employees in a timely manner to facilities where vacancies exist.

SENATOR LAUTENBERG. If so, give us specific examples.

ANSWER. Bradley Tower has attempted, for some time, to get the release of controllers selected to fill vacancies at the tower. Congresswoman Johnson helped obtain some release dates, but the five controllers are still not scheduled to arrive until the beginning of FY 1988. The first four on October 11 and the fifth one on December 12.

The Boston Center has been unable to secure releases for any of their selections. Their last vacancy announcement brought many applicants, but over 20 controllers could not get a release date from their facilities. Of the remaining applicants, three will be released from Anchorage Center at the rate of one per quarter beginning October 1988. One each from Salt Lake Center, Los Angeles Tower, and Houston Center have release dates of October 1988. One applicant each from Memphis Center and Miami Center have release dates of October 1987. One from Sacramento TRACON has a release date of June 1988.

There are numerous other facilities with the same problems.

SENATOR LAUTENBERG. Do you expect to achieve the FPL levels mandated for this fiscal year?

ANSWER. Although we expect to meet the 70% FPL level systemwide, there are several facilities that may not meet the 60% FPL requirement.

SENATOR LAUTENBERG. If not, where do you expect to fall short and by how much?

ANSWER. The following facilities are not expected to meet the 60% FPL level: Chicago Center (45% FPL's), Oakland Center (54% FPL's), Indianapolis Center (55% FPL's), and Akron Tower (54% FPL's). Anchorage is not expected to meet the 60% level, however, they never have been at that level becuase of high turnover.

SENATOR LAUTENBERG. The Committee was told in a recent report received from FAA on June 4 that "One of the primary stumbling blocks to continued improvements in the traffic management system is the lack of TMC's at our larger terminal facilities." The report also says that traffic management duties at terminals have to be done by supervisors on a time permitting basis over and above their normal duties. Is this true?

ANSWER. Yes.

SENATOR LAUTENBERG. Does it adversely affect safety?

ANSWER. No. The major impact is on the efficiency of the operation.

SENATOR LAUTENBERG. Why hasn't FAA requested funding for those TMC positions in the past?

ANSWER. The requirements for terminal TMC positions have only recently been identified. Traffic Management Coordinators have been placed in three airports as required by Congress. Interfacility coordination and operational efficiency has improved measurably. Delays were reduced by 29 percent in October 1986 versus September 1986 while traffic was up 4.2 percent. Also, during November and December, traffic was running more than 94 percent of the September count, yet delays were down 49.5 and 43 percent respectively.

SENATOR LAUTENBERG. Explain why you responded during the hearing of 7/8/87 that you had 400 TMC's at en route centers, but in the June 4 report to the Committee, the Committee was told that there were 226 TMC's at the 20 en route centers?

ANSWER. In the report of June 4, we advised there were 226 TMC's at the 20 en route centers. We have identified a potential need for 400 TMC's and intend to incrementally increase the authorized positions to reach that number in future years. The number cited in the hearing was an error.

THE NTSB RECOMMENDATIONS/FAA's SUMMER SAFETY INITIATIVES

SENATOR LAUTENBERG. In light of the findings of NTSB's investigations, of near mid air collisions and operational errors, are you satisfied with the quality of your own ATC Quality Assurance Evaluations?

ANSWER. We are satisfied with our Quality Assurance Evaluations. All centers, Level V and selected Level IV facilities have been evaluated utilizing a 50 page checklist in the past two years. This checklist is continually updated. Also, we monitor in excess of 12,000 frequencies and/or positions during in-flight evaluations.

SENATOR LAUTENBERG. If not, what do you intend to do about it?

ANSWER. As stated previously, we are satisfied with our quality assurance program.

SENATOR LAUTENBERG. What is so unique about the "new procedures" being put in place this summer for those sectors not being monitored by Central Flow in Headquarters?

ANSWER. The uniqueness associated with the Sector Traffic Management Program (STMP), is that it affords a more dynamic and real time assessment process for identifying operationally acceptable levels of traffic (OALT). Unlike its predecessor, the red sector program which utilized a standardized numerical ceiling to identify potentially impacted sectors, the STMP has no standardized ceiling and takes into account the many variances in system complexity. Factors such as complexity of traffic flows, mixture of aircraft types, and aircraft transitional flight staging (climbing and/or descending) are now factored in when establishing a sector's OALT.

This greater level of awareness and accuracy toward traffic impact predictability allows the Traffic Management Units (TMU's) to fully anticipate traffic management needs in advance and place appropriate programs into effect prior to the traffic adversely impacting any sector. The STMP affords a basis for the daily design of ground based delay programs, miles-in-trail restrictions, and rerouting of excessive air traffic. In this way demand upon the system is spread over additional time and geographical area, assuring that no part of the system is taxed beyond its safety limits.

SENATOR LAUTENBERG. When will you have an automated system in place that will allow you to predict en route sectors saturation for the entire system?

ANSWER. An automated system to predict en route sector loading will be fully operational in the field by June of 1988.

SENATOR LAUTENBERG. For those 81 sectors under local control, how will the restrictions on air traffic flows work?

ANSWER. Under the auspices of STMP, each Air Route Traffic Control Center (ARTCC) is responsible for employing one or more traffic management programs to maintain operationally acceptable levels of traffic in those sectors categorized as either predominately departure or a combination arrival/departure in nature.

Local traffic management programs currently being implemented to reduce traffic in the identified sectors are miles-in-trail restrictions, time intervals, reroutes to circumnavigate identified sectors, and prudent application of capping inflight altitudes to vertically avoid the impacted stratum.

SENATOR LAUTENBERG. How does that procedure differ from what was done before this summer?

ANSWER. The procedures now being employed locally under the STMP are both time and sector specific pre-planned strategies versus the previous tactical to reactionary approach in achieving resolution of encountered capacity problems.

SENATOR LAUTENBERG. Is any additional equipment needed at field facilities to enhance your capability to monitor and better manage traffic flows?

ANSWER. Yes.

SENATOR LAUTENBERG. If so, is it on order?

ANSWER. Yes, the FAA has given the Traffic Management System (TMS) program the highest of priorities due to the critical need to meet increased demands on the air traffic control system and to reduce air traffic delays and controller workload. Consequently, the FAA has undertaken multi-year procurment actions to enhance and expand the TMS operations and support software and hardware.

SENATOR LAUTENBERG. When will it be operational?

ANSWER. The following operational delivery dates are based upon current contract award and schedules:

- TMC Wireless Headsets - August 1987
- New Traffic Management Distributive Processor - March 1988

- TMU Workstations - September 1988
- TMS Computer Workstations for Selected Terminal - September 1988
- Departure Sequencing Program Hardware/Software - October 1988
- Stand Alone Graphic Weather Display Units for TMU's - November 1988

SENATOR LAUTENBERG. Doesn't the lack of TMC's at both terminals and en route centers limit your ability to monitor sectors on a continuing basis and prevent overload from occurring?

ANSWER. Yes, to some extent. However, our concentration is focused on problem areas of today.

As of June 30, 234 TMC's were in place at the 20 domestic Air Route Traffic Control Centers. These individuals, working in concert with the respective terminal and center area supervisors, provide an adequate interim resource to effectively monitor and manage the levels of traffic for those sectors identified.

Additionally, on October 1, 1986, Terminal Traffic Management Coordinator (TTMC) positions were established at Washington National, Washington Dulles International, and Baltimore Washington International Airport Traffic Control Towers. These positions were established by House Report 99-976, as incorporated by reference in P.L. 99-591, the Continuing Appropriations Resolution for FY 1987.

Contained within our FY 1988 Budget Amendment submission are the required future staffing numbers to provide for the following dedicated traffic management positions:

- 20 TMC positions at each of the 21 TMUs.
- 92 additional TTMC positions for selected terminal locations.

SENATOR LAUTENBERG. If not, explain why?

ANSWER. Non-applicable.

SENATOR LAUTENBERG. In light of the limitations of the ASD and the staffing shortages in your Traffic Management System, is it accurate to say without any or qualifications that FAA's new program prevents the number of aircraft controlled by en route centers from exceeding acceptable levels in each sector?

ANSWER. Yes, under ideal conditions, excluding situations such as emergencies, adverse weather, unscheduled navaid or equipment outages, we feel confident the ASD and Sector Traffic Management Program will prevent sectors from exceeding operationally acceptable levels.

SENATOR LAUTENBERG. There are, no exceptions?

ANSWER. When the system falls prey to unpredictable conditions outside the FAA's purview to control, such as weather which represents 65-70 percent of all delays, sectors may incur short periods where acceptable levels may be exceeded. We firmly believe, however, that these programs will enhance our capabilities to better manage and recover more quickly when these situations occur.

SENATOR LAUTENBERG. To what extent are pilots complying with your request for earlier flight plans?

ANSWER. Initial indications are that most pilots are complying with our request for filing IFR flight plans 4 hours in advance of estimated time of departure for flights operating above flight level 230.

SENATOR LAUTENBERG. In retrospect, how many non-weather related delays would have resulted from the imposition of the 5 limits on flights as recommended by NTSB versus those that have resulted to date from the procedures FAA has implemented?

ANSWER. The number of non-weather delays resulting from the imposition of the limits on flights as recommended by NTSB is impossible to predict. The actions that the FAA has taken are, however, a reaction to the same system concerns as voiced by the NTSB. To date, the STMP has accounted for 9 percent of the total system delays since implemented on June 4.

FPL's/FY 1988

SENATOR LAUTENBERG. How many FPL's will you have by the end of FY 1988?

ANSWER. We currently plan to have at least 10,000 FPL's by the end of FY 1988.

SENATOR LAUTENBERG. Why has the number of FPL's remained at around 9500 for this fiscal year so far?

ANSWER. We have been filling numerous supervisory, traffic management, staff, and support vacancies during the year and all must come from the FPL ranks.

ARSA's/CONTROLLER STAFFING

SENATOR LAUTENBERG. The justification for the requested amendment indicates that 45 of the additional controllers you are requesting are needed to deal with the workload associated with new Airport Radar Service Areas (ARSAS). You indicate that you plan to expand the number of ARSA's from 70 at the beginning of this fiscal year to over 90 by September 30. Another 20 - 25 are to be added in fiscal 88. How long has the expansion of ARSA's been underway.

ANSWER. Implementation of ARSA commenced with the establishment of the first three ARSA's on March 6, 1985. This action initiated a phased replacement of most Terminal Radar Service Areas with ARSA's. The ongoing "expansion" is a continuation of the original implementation plan involving various locations which meet candidacy criteria.

SENATOR LAUTENBERG. Why didn't you know about this additional workload before now?

ANSWER. Each facility is different insofar as scheduling of operations and staffing necessary to support the ARSA program. Our earlier projections for traffic growth were apparently too low and we have reconsidered these projections.

SENATOR LAUTENBERG. Why weren't the staffing implications of ARSA's factored into your regular FY 88 request?

ANSWER. Assimilating the requisite data, and ensuring that it was indeed broad in scope and not germane to only a few isolated locations, required a reasonable period of evaluation. As the ARSA program did not have sufficient representative sites established until late calendar year 1986, an appropriate determination prior to the spring of 1987 was deemed premature. In keeping with our fiscal responsibilities we delayed identifying this requirement until sufficient analysis of all factors was concluded.

NATIONAL TRANSPORTATION SAFETY BOARD

STATEMENT OF JIM BURNETT, CHAIRMAN, NATIONAL TRANSPORTATION SAFETY BOARD

ACCOMPANIED BY DAVID KELLEY, CHIEF, OPERATIONAL FACTORS DIVISION

INTRODUCTION OF WITNESS

Senator LAUTENBERG. Mr. Burnett, finally, are you still here? Mr. Burnett, I am sorry that we took so long to get to you. But what with weather, with shortages of personnel and so forth, we cannot exactly plan this the way we want.

We are going into a new forecasting system so that witnesses will be able to get to the table in time.

And I know how busy you are, and we do appreciate it.

Mr. BURNETT. You sound very much like the FAA, Mr. Chairman.

Senator LAUTENBERG. I know. But we know how conscientious your agency is about its responsibilities. We respect it greatly.

We appreciate your leadership, and your forthrightness in the things that you see.

If you have an opening statement, we will welcome it. Otherwise, we will go into some questions.

OPENING STATEMENT

Mr. BURNETT. Mr. Chairman and members of the committee, I want to thank you for the opportunity to present the views of the Safety Board concerning the U.S. air traffic control system.

You are to be commended for your concern for aviation safety and the safety of the traveling public.

We at the Safety Board share your concern.

I have with me Mr. David Kelley, who is the chief of our Operational Factors Division, and the Safety Board's leading expert on air traffic control matters.

ATC RECOMMENDATIONS

On May 13, as you know, Mr. Chairman, the Safety Board issued safety recommendations to the FAA stating that, and I quote, the nation's air traffic control system is at times overburdened with traffic; lacks continuously effective terminal and en route traffic flow control programs; and at some facilities, lacks the number of qualified controllers necessary to fully staff control positions throughout the day.

These recommendations were issued as the result of the Safety Board's investigation of several incidents involving operational errors committed by air traffic controllers.

The Safety Board was also concerned about the increasing trends—the number of operational errors, near midair collisions involving air carriers, and runway incursions.

The Safety Board's investigations and associated interviews with controllers in several facilities prompted concerns about the increasing volume of aircraft in the air traffic control system during peak periods of the controller's workday.

Many controllers stated that an unsafe condition could develop in some of the control sectors if the traffic volume was allowed to continue to increase.

The Safety Board's recommendation letter stated that this peak traffic flow was approaching the limits of the ATC system, and that additional traffic management programs were needed to keep the number of aircraft passing through a given volume of airspace to a level that can be safely separated by the controllers and safely accommodated by the terminal facilities.

FAA RESPONSE

The FAA Administrator responded to these safety recommendations, stating that it was unnecessary to reduce airport acceptance rates, or limit flight plan approval, and that adequate metering of traffic could be affected by present flow control procedures, without imposing additional traffic restrictions.

The letter did not address the limited capability of flow control to effectively meter traffic in the en route sectors to a level perceived to be safe by the controllers.

However, the FAA did allude to enhanced capabilities which will be forthcoming when the new aircraft situation display, the ASD, computer program becomes fully operational.

The Safety Board was led to believe that this new tool would not be effectively implemented until fall, and would thus have little impact on the immediate concern for the normal summer traffic increases.

ADDITIONAL INCIDENTS

The Safety Board's concern about the effectiveness of present flow control procedures was reinforced by the subsequent investigation of two more incidents wherein air carrier airplanes were exposed to potential collision threats because of operational errors.

Both of these errors occurred during a time when controllers were overburdened with a lot of traffic, and complex control problems.

One of these occurred at O'Hare International Airport on May 29, 1987, when two departing aircraft had been assigned the same transponder code. The complexity of the situation was exacerbated by a continued transfer of traffic from the TRACON to the en route center facility, with too little in-trail separation.

They had asked for 10 miles in-trail separation; they were giving them 7 with a promise that it would increase; and I think they were getting 5.

The Safety Board discovered that a supervisor in the en route facility had entered the comments that, and I quote, "it is the worst I have ever seen," and, "this is not a safe operation" in the facility log.

The second operational error we investigated occurred on June 2, 1987, at the Denver air route traffic control center. The Safety Board learned that the primary channel radar was out of service, and the facility was operating on the backup direct access radar channel. And that increases the controller's workload.

Approximately 5 minutes prior to the operational error, the controllers were handling 21 airplanes. And at the time of the incident, there were 16 airplanes on their frequency.

Training was being conducted during the period of both incidents. Also, during the time that both operational errors occurred, there were no flow control restrictions in force to assist in managing the traffic volume and complexity.

Certainly these incidents show that positive steps must be taken to improve flow control if we are to rely on present traffic management methods to handle the summer traffic.

We remain concerned. However, the Safety Board is encouraged by some of the FAA's actions.

NEW ATC PROCEDURES

On June 11, 1987, the Secretary of Transportation released details of new air traffic procedures to, and I quote, further ensure the safety of the traveling public this summer.

It appears that the DOT and the FAA have at least in part acknowledged the need to address the problems of saturated airspace in the ATC system.

In doing so, they have identified and targeted for specific monitoring almost 20 percent of the nation's air traffic sectors, that's 125 of them, as having the potential for saturation this summer.

It seems that the FAA has expedited its plans to use the air traffic—excuse me, the aircraft situation display as an active part of the flow control facility.

We have not yet evaluated the extent to which their immediate program will accomplish the objectives initially planned for fall, but we hope that they will be sufficiently effective in limiting controller workload.

We encourage the FAA to ensure that they have an adequate program for controller feedback so that new problems can be identified and corrected.

The Safety Board will also monitor the program through our oversight and investigative functions, and make recommendations where appropriate.

We hope that if this new program is effective in reducing controller workload, there will be a corresponding reduction in operational errors, runway incursions, and near midair collisions.

OPERATIONAL ERROR FIGURES

Mr. Chairman, the most recent figures that we have gotten from the FAA on operational errors reflect that in June 1986 they had 94 operational errors; in June 1987, 141. And that is precisely a 50-percent increase in operational errors from a year before, and that reflects that it is still a matter of concern.

In fairness, I think that the procedures that the FAA announced on June 11, although they were already at that time experimenting with them, probably did not have a great deal of impact in June, and it will take the July figures to see whether we have a turnaround.

[The statement follows:]

STATEMENT OF JIM BURNETT

Mr. Chairman and Members of the Committee, I want to thank you for the opportunity to present the views of the National Transportation Safety Board concerning the safety of the United States air traffic control (ATC) system. You are to be commended for your concern for aviation safety and the safety of the traveling public throughout the nation. We at the Safety Board share your concern.

On May 13, 1987 the Safety Board issued safety recommendations to the Federal Aviation Administration (FAA) stating that "the nation's ATC system is at times overburdened with traffic; lacks continuously effective terminal and enroute traffic flow control programs; and, at some facilities, lacks the number of qualified controllers necessary to fully staff control positions throughout the day." These recommendations were issued as a result of the Safety Board's investigation of several incidents involving operational errors committed by air traffic controllers. The Safety Board also was concerned about the increasing trends in the number of operational errors, near midair collisions involving air carriers and runway incursions.

The Safety Board's investigations and associated interviews with controllers in several facilities prompted concerns about the increasing volume of aircraft in the air traffic control system during peak periods of the controllers' work day. Many controllers stated that an unsafe condition could develop in some of the control sectors if the traffic volume was allowed to continue to increase. The Safety Board's recommendation letter stated that this peak traffic flow was approaching the limits of the ATC system and that additional traffic management programs were needed to keep the number of aircraft passing through a given volume of airspace to a level which can be safely separated by the controllers and safely accommodated by the terminal facilities.

The Safety Board's recommendations urged the FAA to take immediate action to:

- reduce airport acceptance rates and limit flight plan approval as necessary to prevent continuing increases in traffic levels in the Air Route Traffic Control Center sectors and to ensure that airborne holding is not required except in unplanned circumstances;
- identify control sectors that have the potential to become saturated and implement appropriate flow control programs to space out the air traffic;
- permit no further relaxation in flow control measures; and
- disseminate to airmen the locations and times where traffic density may approach critical limits and encourage flight planning to avoid these areas.

The FAA Administrator responded to these safety recommendations on May 27, 1987, stating that it was unnecessary to reduce airport acceptance rates or limit flight plan approval; and that adequate metering of traffic could be effected by present flow control procedures without imposing additional traffic restrictions. The letter did not address the limited capability of flow control to effectively meter traffic in the enroute sectors to a level perceived to be safe by the controllers.

However, the FAA did allude to enhanced capabilities which will be forthcoming when the new Aircraft Situation Display computer program becomes fully operational. The Safety Board was led to believe that this new tool would not be effectively implemented until fall and would thus have little impact on the immediate concern for the normal summer traffic increases expected during the next three or four months.

The Safety Board's concern about the effectiveness of present flow control procedures was reinforced by the subsequent investigation of two more incidents wherein air carrier airplanes were exposed to potential collision threats because of operational errors. Both of these errors occurred during a time when the controllers were overburdened with a lot of traffic and complex control problems.

One of these occurred at O'Hare International Airport on May 29, 1987, when two departing aircraft had been assigned the same transponder code. The complexity of the situation was exacerbated by continued transfer of traffic from the TRACON to the enroute center facility with too little in trail separation. The Safety Board discovered that a supervisor in the enroute facility had entered the comments that "... its the worst I've ever seen ..." and "... this isn't a safe operation" in the facility log.

The second operational error which was investigated occurred on June 2, 1987 at the Denver Air Route Traffic Control Center. The Safety Board learned that the primary channel radar was out of service and the facility was operating on the backup direct access radar channel (DARC). Approximately five minutes prior to the operational error, the controllers were handling 21 airplanes, and at the time of the incident there were 16 airplanes on their frequency. Training was being conducted during the period of both incidents. Also, during the time that both operational errors occurred, there were no flow control restrictions in force to assist in managing the traffic volume and complexity.

Certainly these incidents show that positive steps must be taken to improve flow control if we are to rely on present traffic management methods to handle the summer traffic.

The FAA Administrator, in his May 27, 1987 response to our recommendations, indicated that he believes that the frequency of occurrence of operational errors had peaked in the first quarter of 1987 when the number of occurrences exceeded the 1986 level by more than 20 percent. While the Administrator cited preliminary figures which showed a downturn in the second quarter, our numbers, received from other FAA sources, show that April and May operational error occurrences were still about ten percent higher than the comparable 1986 numbers. Near midair collision reports are also increasing; 173 reports have been received through the first five months of 1987 compared to 124 for the same period in 1986.

Mr. Chairman, we remain concerned. However, the Safety Board is encouraged by some of the FAA's actions.

On June 11, 1987 the Secretary of Transportation released details of new air traffic procedures "to further ensure the safety of the traveling public this summer." On the same date the Secretary invited Safety Board Members and staff to a briefing on the new safety initiatives. All five Members attended this briefing in which senior FAA air traffic personnel explained the new enroute sector traffic management program which was implemented, in part, on June 4, 1987. As explained, this new program will meter air traffic so that enroute sector and airport capacities are not exceeded. This will be accomplished by both central and facility flow control programs that will delay flights on the ground, reduce speeds enroute and reroute airplanes that are already airborne.

It appears that the DOT and the FAA have at least in part acknowledged the need to address the problems of saturated airspace in the ATC system. In so doing they have identified and targeted for specific monitoring almost twenty percent of the nation's air traffic sectors as having the potential for saturation this summer. Thus, it seems that FAA has expedited its plans to use the Aircraft Situation Display as an active part of the Flow Control facility. We have not yet evaluated the extent to which their immediate program will accomplish the objectives initially planned for fall, but we hope that they will be sufficiently effective in limiting controller workload. We encourage the FAA to ensure that they have an adequate program for controller feedback so that new problems can be identified and corrected. The Safety Board will also monitor the program through our oversight and investigative functions and make recommendations where appropriate. We hope that if this new program is effective in reducing controller workload, there will be a corresponding reduction in operational errors, runway incursions and near midair collisions.

Mr. Chairman, that concludes my formal statement. I will be pleased to respond to any questions you may have.

INCREASED AIR TRAFFIC

Senator LAUTENBERG. Thank you very much, Mr. Burnett. I do not know whether you were sitting here before when I was talking to the Secretary and asked the question about whether or not FAA had conformed in their judgment to the request that you made to alleviate the problems for this summer's expected increase in traffic.

I believe the answer was yes. Then we got into a contest about what you meant when you said, take immediate action to reduce the maximum acceptance rate at those airports now monitored by CFC, and place limits on en route flight plan approvals.

I want to go from Chicago to New York and I make a request. I assume that what you are saying here is, listen, if the request is from 8 a.m. to 9 a.m., you are full. Do not take that request. Do not try to fill it. Leave some room in there on these approvals, so people know whenever they file they are not necessarily going to get it. We will not just keep jamming this thing in so that there is no margin.

Am I expanding your intent here?

Mr. BURNETT. That is basically what we asked for. And let me see if I can define the difference between what they have done, and what we asked for.

What we envisioned when we made our recommendation was relatively static steps that they would take. In other words, they would arbitrarily reduce airport acceptance rates in order to alleviate the en route environment; take some other steps in that direction that would be arbitrary, and in addition to relieving the total workload, would increase delays fairly dramatically.

What they have attempted to do, which is aimed to achieve the same thing that we desired, is to adopt a more dynamic system, where they do this on sort of a day-by-day business, using the aircraft situational display computer program.

The problem is that that—the predictive capability, the automated predictive capability of that program will not be on line until the fall sometime. Right now, they're trying to make a dynamic program without it being automated, which requires them to interpret where the problems happen on one day, and take corrective action the next day, which is not predictive; it is reactive.

To the extent that they are trying to do it dynamically, that is better if it works. But it is going to be a tricky thing for them to make work.

And so I do not think we can have a high level of confidence that they are going to succeed in what they are doing, although it will be very good if they do.

There are some other recommendations. One of the recommendations we made to them they have adopted in full.

Another, they have given us no encouragement on, and that is the one that deals with reevaluating some of the in-trail restrictions that they have allowed to be relaxed early on in the year.

And they have done a good job, I think, of defining which sectors have the problems, which was something we asked them to do. I am not sure that they have followed up with all the—with trying to establish the kind of quantitative limits on the capacity of the system in each one of the sectors. At least if they have, I have not seen those figures.

So they have done some of what we have asked them to do, but certainly not all of what we asked.

RESPONSE TO NTSB RECOMMENDATION

Senator LAUTENBERG. I understand. But they certainly have not met the recommendations that you put out in total.

Would you say that they met them, because what we are really talking about is not a quantifiable thing, but rather a procedural thing. The Administrator responded in May 27 that it is unnecessary to reduce airport acceptance rates, or limit flight plan approval; and that adequate metering of traffic could be effected by present flow control procedures, without imposing additional traffic restrictions.

It is just not true. It is not true because what we see is additional delays. As long as we pack the system so that it's overflowing the top of the bottle, then invariably, you pay for that by longer delays.

If I understood, what you intended was, look, don't make promises you're not going to be able to keep. Instead of loading the system up that far, keep it busy, but make sure you can handle what's coming along.

Mr. BURNETT. That is what we asked.

Senator LAUTENBERG. Are you satisfied with the changes FAA made relative to the Board's priority one urgent action recommendation in terms of the limiting of the workload for the controller?

Mr. BURNETT. Well, no, we are not satisfied. We are pleased that they have made the steps they have made. They probably may be more than we expected them to do, but certainly less than we would like.

Senator LAUTENBERG. You commented that FAA's official response to your recommendation did not address the limited capability of flow control to meter traffic and en route sector workload to a level perceived to be safe by the controllers.

That limitation still exists, limited capacity?

Mr. BURNETT. Not to the same extent it did when the Administrator made his formal response. They did, in the program they announced on June 11, in part respond to us. Not still to the extent that we would like.

Because what transpired between May 27 when the Administrator sent his formal response, and June 11, was the incident in Chicago on the 29th. And of course it was on the 9th and 10th that that became public knowledge in the nation's newspapers.

AIRCRAFT SITUATION DISPLAY

Senator LAUTENBERG. Are you satisfied with the capabilities of the ASD? You said before you kind of agreed with our questions and the response that this is a developmental thing.

Mr. Burnett. Well, I will let Mr. Kelley respond to that.

Mr. Kelley. Well, Senator, I think it is accurate to say that the ASD has the potential for being an excellent tool for dynamic flow control.

But at the present time it does not have the dynamic predictive capability that is needed to effectively monitor the traffic in the air traffic control system.

At the present time the FAA is using the ASD to validate certain sectors to determine if in fact they are becoming saturated. And then, as the chairman says, they take action the next day to implement a program to restrict traffic.

So certainly, that is a reactive flow control process.

In addition, the FAA has taken the 125 sectors, and they have divided them to 44 that central flow control will monitor, and the remaining 80-some are now reassigned to the facilities to monitor.

And these air traffic facilities do not have this ASD and will not have it for several months, or even longer.

So I think it is fair to say, when the FAA has a dynamic, predictive ASD, which will be able to look ahead 1 hour, 2 hours, or 3 hours, and say a given sector is approaching the threshold of saturation, then that will give them time to take appropriate action to resolve the situation.

They are not there yet.

Senator Lautenberg. So again, this is in react mode more than forecast mode, so that the developments are still taking place.

This is really the old testing that is going on now, is that not true?

Mr. Kelley. Well, the ASD, as the FAA envisioned it, would be brought on line in incremental stages. What you are seeing now is the initial stage that can be used to validate sector saturation.

They are in a process of appropriating money, going out with purchasing to get additional computer power, additional computer terminals.

Ultimately they will have one of these ASD's in every one of the 20 centers. I do not know exactly when that will take place, but that is the ultimate goal.

And I believe when they get there they will have a very effective tool for flow control.

Senator Lautenberg. But right now, would you envision this system as working off of flight plan filings, saying, OK, this is what we intend to happen. We want to go from Chicago to New York or what have you. And all this is assembled, and the computer says wait a second, if you approve all these, do not approve any more coming into the New York center, because you have got Syracuse and Miami and all these other places wanting to come into La Guardia. And 2 hours from now, that place will be in gridlock. So that is what they ought to be doing.

Mr. Kelley. Well, that is correct. That is what it is designed ultimately to do.

Senator Lautenberg. OK. But right now it would be improper to characterize it as a functioning part of a control system that would allow you to do anything other than to push back delays, other than to respond to crisis situation?

Mr. KELLEY. I view the system right now, Senator, as a troubleshooting tool that the FAA has. And it's nothing more than that.

They have three or four of these ASD displays in central flow. And with all due regard, they cannot monitor 125 sectors with that equipment.

Senator LAUTENBERG. Of course.

Mr. BURNETT. Or even 44.

Mr. KELLEY. That is correct.

Senator LAUTENBERG. Do they have the flexibility, as was indicated by earlier witnesses, of including an evaluation of the whole 125 in the system with what is presently there? It is fair to say no, right?

Mr. KELLEY. Yes, sir.

Senator LAUTENBERG. I could not get them to say no.

CHICAGO AND DENVER INCIDENTS

What type of systemic deficiencies did you find as a result of your recent investigation of incidences in Chicago and Denver?

Mr. BURNETT. It is important, Mr. Chairman, to realize that we were talking about something entirely different there from what we have been talking about today.

We are not talking about personnel problems. We are not talking about basic capacity limits, although it relates to workload.

The air traffic control system has never been based on the philosophy of providing total positive protection to instrument flight rules aircraft from visual flight rules aircraft.

What the Safety Board identified yesterday in its meeting on the Cerritos accident was the need to redefine the philosophy of the system, so that you do provide positive control in the terminal environment as well as the en route environment to IFR aircraft and to rebuild the system both in terms of equipment, training and procedures in order to do that.

Right now, the controller out at Los Angeles was entitled to some extent to ignore the PA28 that was involved in that accident, because it was low on his priorities of duties.

That system is designed that way now, and we think we have to look forward to a redesign that will involve positive protection.

Senator LAUTENBERG. Do you think there was any pressure on that controller as a result of maybe an excessive work requirement?

Mr. BURNETT. Well, at the time that accident happened, he did have a relatively light workload. He did have some incidents that came up right around that time that complicated his workload.

But it is important to realize that he was not required to give that traffic, except when he had time to do so, as far as the Piper 28, to the DC-9 aircraft.

So he had some other duties at that time, and we cannot fault him for tending to those duties.

Senator LAUTENBERG. Was there just a glitch in the system that permitted that situation?

Mr. BURNETT. Basically what he had was, they switched runways for this DC-9, decided to bring it in on another runway. So it had to be resequenced, which complicated his duties.

And then he had this intruder, this other intruder, that he identified as being within the TCA, because it communicated with him. Therefore, he knew the altitude.

He did not know the altitude of the PA28, and there was an assumption that I think he was entitled to make that it was not in the TCA.

Senator LAUTENBERG. Would a supervisor's oversight have influenced this?

Mr. BURNETT. Well, if someone else had been looking at the scope at the time and might have seen this aircraft and had realized that it was climbing—but then, see, they had no mode C, no altitude information to know that—certainly the controller said he didn't see the target.

If somebody had seen the target and had called it out, it probably would have avoided the accident.

But the Board did not, in saying what we did about the systemic problems of the air traffic control system in relation to that, we were not identifying a problem or the performance of that personnel or other air traffic control personnel.

AVIATION STATISTICS

Senator LAUTENBERG. Do you know why, in the evaluation of the safety worthiness of the system, why the Cerritos incident is left out of the statistics?

I mean, I hear them say there are no fatalities in the year and so forth.

Mr. BURNETT. We use statistics to produce rates. And therefore the statistics that we publish, including rates, of accidents involving U.S. air carriers have to be consistent in being comparable to the exposure data that we have.

We don't include foreign carrier activity in our country in the exposure data. If we did in the accident data, it would skew the rates. And that is basically the reason for that.

The rates that are published apply to U.S. air carriers. Now the accidents and fatalities are all in our data base, but they are not in the statistics that apply that we publish that apply to U.S. air carriers.

Senator LAUTENBERG. Everybody is aware of that, and I think it is unfair to the people who were killed there. They were valued lives, and they were killed because of a problem that existed in the system.

And I think it really begs the truth when we talk about a year without commercial fatality.

People were killed over California, our territory——

Mr. BURNETT. But on the other hand, we include a U.S. carrier that has an accident in a foreign country, we include that.

Senator LAUTENBERG. You are talking about now a scheduled carrier.

Mr. BURNETT. That is right.

Senator Lautenberg. You are not talking about the kind of thing that flew into Greenland.

Mr. Burnett. Excuse me?

Senator Lautenberg. The flight that went down in Greenland, the charter flight.

Mr. Burnett. That was included in our statistics, yes, in Canada.

Senator Lautenberg. Well, we thank you very much, Mr. Burnett, and your colleague. As usual you are forthright, candid. You do call it as you see it, and that is the way it should be.

You are an umpire in the purest sense of the word, and when it is a strike, you have got to call it a strike.

FAA STAFFING NEEDS

I just, to sum up for a minute while you are here, this budget amendment indicates that there are serious shortcomings in FAA's regular procedures for estimating its staffing requirements.

And I think you would say yes to that, would you not?

Mr. Burnett. Yes.

Senator Lautenberg. We do not have, as I heard and as we understood it, a comprehensive, reliable system yet in place for predicting needs beyond the next year.

Do you agree with that?

Mr. Burnett. I do not know the answer to that.

Senator Lautenberg. OK. I will not press you on that. But that is an observation I make based on the testimony that we have heard today, that we do not see the kind of staffing standards for critical positions, TMC's and firstline supervisors at en route centers.

We do not have regular procedures for picking up the workload increase associated with ARSA's, even though there are 70 already in operation.

Existing staffing levels for controllers are now being evaluated. Well, we hope that they will be evaluated as necessary, but there is a lot of decisions made based on the past procedures, and apparently, those procedures are not quite what we would like them to be.

OFFICE OF AVIATION SAFETY

So again, I use the moments that you are here with us to just kind of update that. And I would ask you, in closing, to respond to the safety office commentary.

You must know Mr. Hendricks, he was an employee for some time, or member of the NTSB, a qualified professional. His response was that maybe they ought to have a little more independence, I think was what he said, and that perhaps there could be a value—or rather, let me ask you not to comment on his comments but rather mine.

Do you think that that office maybe ought to have a review routine in advance of or apart from critical incidents response?

Mr. Burnett. Well, first thing, let me say that the Safety Board has a high opinion of that office within the FAA, and we have been very supportive of them.

And in fact, one of the problems we have had with the FAA is that when we investigate air traffic incidents and air traffic accidents, that the air traffic people want to come in and sort of edge them out, and we want to deal basically with them.

I think it is very important that there be, outside of air traffic management, a thorough review of accidents and incidents. It would be nice if at least for a number of those, far more than we at Safety Board are able to do, that we were able to do that.

But with our staffing constraints, that is not really feasible or anywhere within our reach. And I think it would be very wise for the FAA to do that in some function that is independent of air traffic management.

Because within the FAA air traffic management seems to me to be very protective of its own status. And so I would definitely support that kind of approach internally within the FAA.

Senator LAUTENBERG. Sort of an IG-type thing?

Mr. BURNETT. Well, I think it would be better for them—you know, the Safety Board sort of performs that function in a truly independent way.

Senator LAUTENBERG. Right.

Mr. BURNETT. I think they definitely need to be reporting to the administrator, reflect a close relationship with him rather than adversarial at that level.

But it certainly needs to be independent of air traffic management. And when you say, IG sometimes you——

Senator LAUTENBERG. No; I think you make a good point. But you would recommend, as I hear you, that that office, the safety office, include in its agenda review of the system apart from just responding to an incident.

Would you recommend that it have a normal audit function, audit not in the sense of doing the figures, but rather, doing the staffing and the quality of the management in these centers?

Mr. BURNETT. We have, in several of our investigations, identified significant problems with the FAA air traffic control quality assurance program.

And that quality assurance program, I do not think, can be removed completely. It has to be internal to air traffic control. But it certainly needs to have review.

And that, as you suggest, may need to go beyond the incident. We have enough of these operational errors. If we really review, thoroughly investigate, and independently investigate, 141 operational errors in the month of June, then you are going to get a pretty good picture of what is happening out there and what the problems are.

And so beyond that, to what degree they should be—they probably need to be looking at things like how the air traffic control assesses the criticality of incidents, and the reporting system, which as you know we have had problems with before.

Somebody needs to be reviewing that. And as I say, ideally, I think the Safety Board should have a larger role. But that would envision resources that we are not apt to receive to do that kind of thing.

Senator LAUTENBERG. Well, we are happy to have you with us, and once again, compliment you on the work you are doing.

Mr. BURNETT. Mr. Kelley pointed out that it might be good to have in the record that when they asked the controllers to come in, and they identified these 125 sectors that were critical, that that process was done under the Safety Office under Mr. Hendricks, and not in air traffic control, which I think is a good example of how they use that, have already used that, in a very constructive manner, and have managed to get people out from under the supervision of the people whom they work for.

Senator LAUTENBERG. So there is a degree of independence required to really understanding what is coming in. There has to be a forum, a platform, an avenue, for the controllers to participate in the decision-making process.

I am not talking about, do you want to do this or do you not? But rather, what do we need? What do you see? How do you feel about it?

And the frustration led to the formation of a union.

Mr. KELLEY. Well, it is an interesting concept that you are raising, Senator. And it may be somewhat analogous to an industry. You have production and inspection, and they do not have anything to do with each other.

In other words, inspection has no allegiance to production. And I think if you do have shortcomings in the FAA's quality assurance program, it is because those people are structured within the air traffic service, and they have allegiance to air traffic management.

So the question is, are they totally objective when they go out and complete this function?

Senator LAUTENBERG. Very few companies do not have, of any size, do not have an internal audit department. And that audit department reports often to the board of directors, not to the company's line management, for that reason.

It is designed to step on the toe, put a pebble in the shoe, all those kinds of things.

CONCLUSION OF HEARING

Thank you all very much for being here. The meeting is adjourned.

[Whereupon, at 1 p.m., Wednesday, July 8, the hearing was concluded and the subcommittee was recessed, to reconvene at the call of the Chair.]

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